Hospital and Medical Care for all Our People

"A Program of Great Hope, of Almost Infinite Promise, and Yet of Great Practicability"

Reports of Chairman and Sub-Committees of

North Carolina Hospital and Medical Care Commission 1944-45

(Data Revised February, 1947)

CONTENTS

NORTH CAROLINA HOSPITAL AND MEDICAL CARE COMMISSION AND ITS SUB-COMMITTEES, 1944-45

Clarence Poe, Raleigh, Chairman

Dr. C. V. Reynolds, Secretary

Hospital and Medical Care for Our Rural Population

Thos. J. Pearsall, Chmn., Rocky Mount
Dr. G. M. Cooper, Vice-Chmn., Raleigh
Dr. C. Horace Hamilton, Raleigh, Secretary
J. B. Slack, F.S.A., Raleigh
Dr. Jane S. McKimmon, Raleigh
Harry B. Caldwell, Greensboro
R. Flake Shaw, Greensboro
J. G. K. McClure, Asheville
Dr. B. E. Washburn, Rutherfordton
Dr. S. H. Hobbs, Jr., Chapel Hill
M. G. Mann, Raleigh
Dr. W. C. Davison, Durham

Hospital and Medical Care for Our Industrial and Urban Population

Charles A. Cannon, Chmn., Concord
Chas. A. Fink, Vice-Chmn., Spencer
Dr. I. G. Greer, Thomasville
Dr. J. B. Sidbury, Wilmington
E. T. Sandefur, Winston-Salem
Reuben Robertson, Canton
C. C. Spaulding, Durham
Dr. Edson E. Blackman, Charlotte
Dr. C. C. Carpenter, Winston-Salem
Miss Flora Wakefield, Raleigh
Mrs. W. T. Bost, Raleigh

Special Needs of Our Negro Population

Dr. E. E. Blackman, Chmn., Charlotte
C. C. Spaulding, Durham
Dr. R. E. Wimberly, Raleigh
Dr. Clyde Donnell, Durham
Dr. N. C. Newbold, Raleigh
Alexander Webb, Raleigh

Four-Year Medical School for University and Hospital Facilities

Dr. P. P. McCain, Chmn., Sanatorium
Josephus Daniels, Vice-Chmn., Raleigh
Dr. Donnell Cobb, Goldsboro
Dr. Paul Whitaker, Kinston
Mrs. Julius Cone, Greensboro
Dr. Hubert B. Haywood, Raleigh
James A. Gray, Winston-Salem
Alexander Webb, Raleigh
Dr. W. R. Berryhill, Chapel Hill
Dr. C. C. Carpenter, Winston-Salem
Dr. W. C. Davison, Durham

Mental Hygiene and Hospitalization

Dr. James W. Vernon, Chmn., Morganton
Bishop Clare Purcell, Vice-Chmn., Charlotte
Mrs. R. J. Reynolds, Winston-Salem
D. Hiden Ramsey, Asheville
Judge S. J. Ervin, Morganton
Paul Bissette, Wilson
John W. Umstead, Chapel Hill
W. G. Clark, Tarboro
Mrs. Frances Hill Fox, Durham
Dr. Maurice H. Greenhill, Durham

Committee on Statistical Studies

Dr. C. Horace Hamilton, Chairman, N. C. State College, Raleigh

Hospital and Medical Care Plans in Other States

Dr. W. M. Coppridge, Chmn., Durham
R. G. Deyton, Raleigh
Dr. Roscoe D. McMillan, Red Springs

Foreword by the Chairman

In 1944-45 I served, by appointment of Governor Broughton, as Chairman of the newly created "North Carolina Hospital and Medical Care Commission."

This commission was not only composed of 60 distinguished North Carolina men and women, representing all important classes of our citizenship, but in order to make its labors more effective, was subdivided into seven ably manned Committees as shown on the preceding page.

These sub-committees made what Dr. Carl V. Reynolds, State Health Officer, called at the time "the most comprehensive, accurate and informing review of health conditions ever made in the history of North Carolina—and probably the best ever yet made for any Southern State."

For this reason both the Medical Care Commission and the North Carolina Good Health Association have called for the republication of the veritable treasure house of information collected in these reports. In doing this it has also seemed wise to revise all data, where practicable, so as to bring it up to date. That is to say, the latest available data as of February, 1947, rather than November, 1944, is now presented herewith, in so far as possible. For this revision especial thanks are due to Dr. C. Horace Hamilton.

In effect this volume becomes a condensed but fairly complete report of all major activities of the campaign for "More Doctors, More Hospitals, More Insurance" in North Carolina from the time the Hospital and Medical Care Commission was appointed by Governor Broughton, February 28, 1944, until the officially State-sponsored Medical Care Commission took over on July 27, 1945. In this period the 60 members of the Hospital and Medical Care Commission were privileged to play an active part in four fortunately fruitful efforts:—

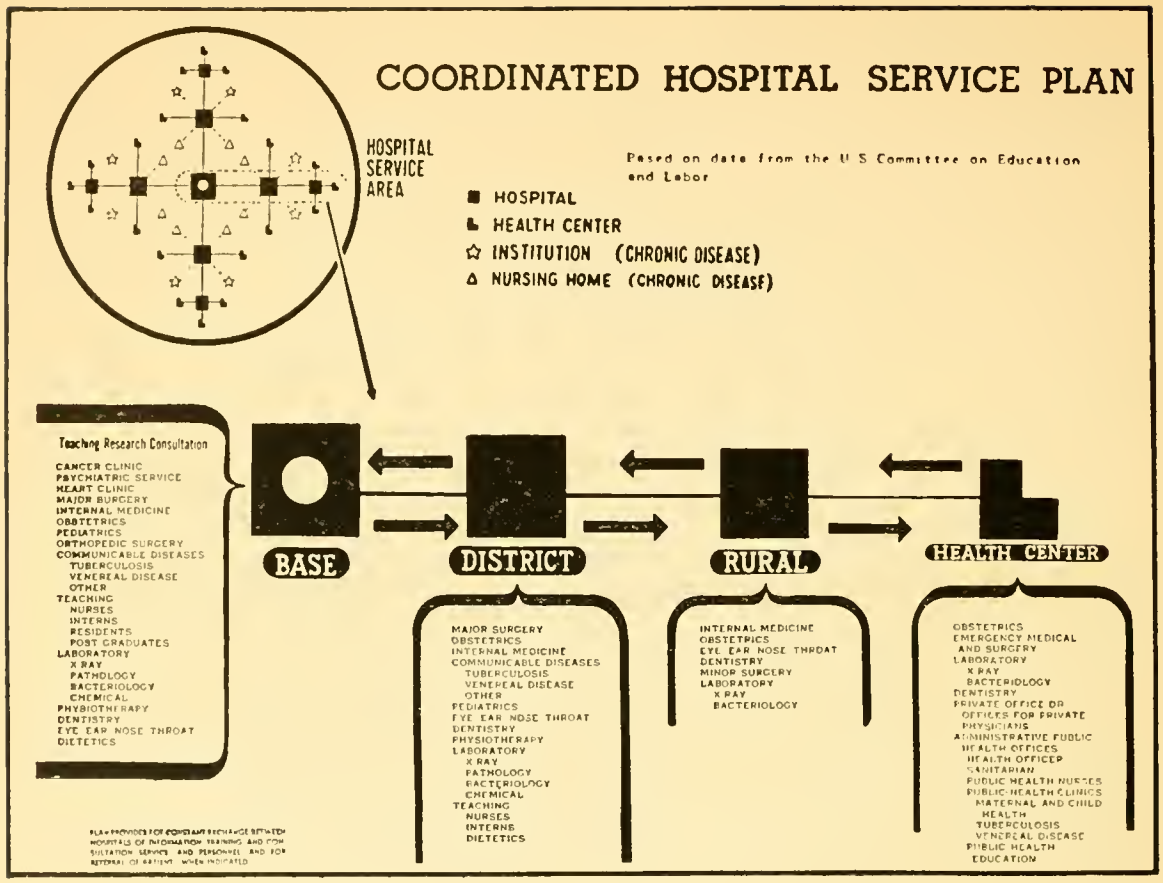
1. To inform and arouse our people as to existing conditions and needed remedies.
2. To secure needed State legislation.
3. To assist in the nation-wide study of hospital conditions and needed remedies by the National Committee on Hospital Care.
4. To enlist the support of all North Carolina Senators and Representatives in behalf of the Hill-Burton Act from which North Carolina should ultimately receive $17,500,000 for hospital building.

Furthermore, while resolutely determined to discover and uncover all the facts about North Carolina hospital and medical care conditions, the highlight of all our activities was not the discovery about the shockingly high 57% rejection rate of North Carolina boys in the American armies but rather the far more astonishing discovery that among draftees who had grown up in North Carolina orphanages and who had had not-too-expensive hospital and medical care plus sound but not-expensive nutrition, the rejection rate had been only 3%!

This is a beacon light to guide our people as they fare forth on a program which is indeed one of "great hope, of almost infinite promise, and yet of great practicability."

CLARENCE POE

Raleigh, March 1, 1947.



Complete hospital service which is both convenient and of high quality can be provided only if there is a high degree of *coordination* of hospitals and health centers as illustrated in the above chart. *Rural hospitals and heath centers or clinics* are necessary to provide convenient medical service for minor illnesses and conditions not requiring highly specialized professional care. These small hospitals and health centers or clinics are also available for emergencies of all kinds.

The district or regional hospital is the focal point for coordinating hospital service for several rural hospitals and health centers covering either several counties or possibly a smaller but densely populated urban area. These district hospitals are large enough to provide highly specialized surgery and medical care for major or serious illness. Small hospitals and health centers refer complicated cases to district hospitals and depend upon such hospitals also for advanced laboratory and diagnostic work and for consultation.

The teaching hospitals not only serve as teaching centers for the training of students, nurses, internes, and resident physicians, but also provide facilities and personnel for post-graduate medical education, clinics and consultation services for hospitals and doctors in the small community along with specialized diagnostic research and therapeutic services.

I

Our Supreme Health Needs are: 1)More Doctors, 2)More Hospitals, 3)More Insurance

(Preliminary Report to Governor Broughton and to the People of North Carolina. Adopted October 11, 1944.)

In the office of Governor J. M. Broughton on October 11, 1944, the "State Hospital and Medical Care Commission," appointed by him the preceding February, met to hear reports from State Chairman Clarence Poe and six sub-committee chairmen: Dr. P. P. McCain, "Four-Year Medical School"; Charles A. Cannon, "Hospital and Medical Needs of Urban and Industrial Population"; Thomas J. Pearsall, "Hospital and Medical Care of Our Rural Population"; Dr. E. E. Blackman, "Special Needs of Our Negro Population"; Dr. W. M. Coppridge, "Hospital and Medical Programs in Other States"; Dr. James W. Vernon, "Mental Hygiene and Hospitalization."

After discussion of all reports, the full Hospital and Medical Care Commission adopted the following preliminary report and appeal to the people of the State.

To the People of North Carolina:

On January 31, 1944, at a meeting of the Trustees of the University of North Carolina, Governor J. M. Broughton presented with strong approval a report from a committee of distinguished physicians (this committee including the president, president-elect and three past-presidents of the North Carolina Medical Society) appealing for a great forward step in the life and progress of North Carolina.

These distinguished leaders of the state's medical profession pointed out that North Carolina is now the 11th most populous state in the Union but is 42nd in number of hospital beds per 1000 population (only 6 states lower in rank) and 45th in number of doctors per 1000 population (only 3 states lower in rank) and joined Governor Broughton in recommending two far-reaching remedies as follows:

1. *The Expansion of the Two-Year Medical School at the University into a Standard Four-Year Medical School with a Central Hospital of 600 beds or more;*
2. *A Hospital and Medical Care Program for the entire state with this noble objective as expressed by Governor Broughton: "The ultimate purpose of this program should be that no person in North Carolina shall lack adequate hospital care or medical treatment by reason of poverty or low income."*

By unanimous action the trustees of the Consolidated University approved this twofold program. Almost immediately thereafter Governor Broughton named a "State Hospital and Medical Care Commission" which has been busy ever since investigating conditions, scrutinizing defects, and weighing suggested remedies. Subcommittees were named as follows:

Hospital and Medical Care for Our Rural Population
Hospital and Medical Care for Our Industrial and Urban Population
Special Needs of Our Negro Population
Hospital and Medical Care Plans in Other States
Four-Year Medical School for University and Hospital Facilities

After nearly eight months of investigation and study the State Hospital and Medical Care Commission now presents to the people of the state the following findings and recommendations:

1. Our basic and permanent aim should never be at any time less lofty and comprehensive than the Governor's declaration approved by the 100-man Board of Trustees of the Greater University: "The ultimate purpose of this program should be that no person in North Carolina shall lack adequate hospital care or medical treatment by reason of poverty or low income."

2. In order both to remedy the most urgent needs of today and work toward the larger program of tomorrow, three things are supremely needed:

A. *MORE DOCTORS*
B. *MORE HOSPITALS*
C. *MORE INSURANCE*

These are the three mutually indispensable legs of our three-legged stool. We cannot have enough doctors without more hospitals . . . nor enough hospitals without greater popular ability to pay for hospital service . . . and such ability to pay on the part of the poorer half of our population is impossible without insurance.

3. In each area we must be especially diligent to serve where need is direct and most challenging. This direst need is:

Among economic groups, *the poor*
Among occupational groups, *tenant farmers*
Among races, *the Negro*
In the two major geographical areas of the state, *Eastern North Carolina (and our mountain counties)*
Inside family groups, *mothers in childbirth and infants in the first months of existence.*

Supporting Data: North Carolina ranks 41st (only 7 states lower) in maternal deaths per 1000 live births . . . and ranks 39th (only 9 states lower) in number of infant deaths per 1000 live births. Minimum approved number of hospital beds is 4 per 1000 population, but in Eastern North Carolina and Western North Carolina number of beds per 1000 population is only:

	Whites	*Colored*
Eastern Counties	1.59	.92
Western Counties	2.43	2.38

Minimum approved number of doctors is 1 for each 1000 people, but Rural North Carolina (1940) has only 1 doctor for each 3,613 people.

4. Our program is not one of communism. It is not one of "Socialized Medicine." It will not destroy the fine relationship of doctor and patient. To "Socialized Medicine" as commonly understood it has, as someone has said, the same relation that vaccination has to smallpox—*"it prevents you from getting the real thing."*

5. The masses of the people are determined to find some way to work steadily toward the goal set forth by Governor Broughton. To fail to help them may leave them to leadership dangerously unsound. Our desire is to help constructively—to co-operate for larger things with existing physicians, hospitals and other medical agencies. Our purpose indeed is "not to destroy but to fulfill."

6. We fully realize that such a program cannot be achieved overnight or at one session of our General Assembly. We do most confidently ask, however, that a realization of this fact shall not be used to prevent the state from doing less than the utmost it is possible to do.

For what we now face is the need not for a normal two-year gain in a program already well advanced but the imperative need for a great advance in a highly important program 20 years overdue.

7. The poor of the state have indeed heard gladly of this program. Men and women of wealth, we rejoice to say, have been equally quick to proffer their support. Just as North Carolina in 1900-1920 spent larger sums than ever before for Better Schools but found it a good investment for all classes, and again in 1920-40 greatly increased its expenditures for Better Roads with similar benefits to rich and poor alike, so we may now greatly increase our expenditures for Better Health and find all classes of North Carolinians bettered as a result.

So much for three basic health needs of our people and the spirit in which your State Hospital and Medical Care Commission has sought to find ways and means of meeting these needs. As a result of long study by your Commission and its various Subcommittees, we now recommend the following measures for approval by our people and their forthcoming General Assembly:

A. To Meet the Need for More Doctors, Better Distributed

North Carolina is faced with an imperative need both for more doctors and a better distribution of doctors. While an accepted formula is that there should be 1 doctor for each 1000 population, North Carolina has only 1 doctor for each 1,554 people . . . rural North Carolina has only 1 doctor for each 3,613 people . . . and there is only 1 colored physician for each 6,916 colored people. To remedy this situation we recommend:

A State Supported Four-Year Medical School. The Commission gives its unqualified endorsement to the proposal that the present two-year medical school at the University of North Carolina be expanded into a standard four-year medical school with a central hospital of 600 beds. North Carolina students trained in North Carolina will likely remain in North Carolina to follow their chosen profession.

Loan Funds for Medical Students. The Commission recommends that a loan fund be established by the State Legislature, particularly for promising youth, male or female, white or non-white, who wish to become physicians in North Carolina, with extra inducements provided for those who will agree to practice medicine at least 4 years in rural areas. Ability rather than wealth or social status should be the principal test for admission to the medical schools of the state.

Medical Training for Negro Youth. This Commission recognizes the high moral duty of the state to provide greatly improved opportunities for enabling capable Negro youths to become physicians serving their race, and we recommend a continuing study of various methods of achieving this end, including suggested North Carolina co-operation with adjoining states in establishing a Regional Medical School for Negroes, North Carolina to take the lead in this matter with as prompt action as possible to follow reasonably adequate time for study and investigation.

B. To Meet the Need for More Hospital Facilities

1. The Commission recommends that the state provide a total of $5,000,000 to be expended, as called for under prescribed regulations, for building and assisting counties and communities to build and to enlarge hospital and health centers wherever and whenever they are needed in the state. This is based on an eventual need of 6,000 additional hospital beds.

2. It is recommended that grants be made for the construction of new hospitals only in areas not adequately served by existing hospital facilities, and only for the purpose of supplementing or expanding the facilities of existing pubicly owned hospitals or those operated on a non-profit basis.

3. It is further recommended that no grant shall exceed 50 per cent of the cost of construction and equipment of a new hospital or the expansion of an existing hospital; and that within such limitation the proportion of the grant to the total cost be based on economic conditions within the areas to be served, the financial ability of the local governmental unit which will own or operate such facility, and on the availability of funds from other sources.

4. Such a state-wide program to meet the urgent hospital needs of our people should include (in addition to the Central Hospital at the Four-Year Medical School):

(a) *A small number of District Hospitals* of approximately 100 beds. These hospitals would be complete in every sense of the word, and would serve both rural and urban people.

(b) *A large number of County or Rural Hospitals* of approximately 60 beds (including improvement or enlargement of existing facilities, particularly those that are already publicly owned or operated on a non-profit basis).

(c) *Health Centers* in small rural communities (available to all qualified physicians in the area) to provide simple diagnostic and laboratory services, facilities for minor operations, dental services, obstetrical service, etc., with a small number of beds for cases not requiring services of a larger hospital. Such Health Centers should also be used by the public health service in carrying on its preventive and educational work.

(d) To provide for the more adequate care of low-income persons in hospitals, we recommend that the state appropriate $1 per day for each indigent patient treated. The Duke Endowment now provides $1 and this together with $1 from the state would provide $2 per day—counties, municipalities, etc., making up the remainder of the costs.

(e) It is recommended that the Legislature provide for a permanent State Hospital and Medical Care Council of adequately qualified persons which should adopt policies designed to maintain the highest standards of service, efficiency, economy and professional excellence in the hospital building program, the medical student loan fund, and the general administration of the state hospital and medical care program, strict provision being made to safeguard the program from

political interference. To encourage continuing community pride, initiative, and support, any hospital receiving state-aid should remain under the professional, administrative and financial control of its own board of trustees elected locally from representative citizens in the community.

(f) Appropriations for public health work should be increased until the state has an entirely adequate program for the prevention of disease, thus reducing needed hospital and medical care to the lowest practicable minimum.

(g) We endorse the proposal for a general examination of school children to discover remediable physical defects, such defects to be remedied at public expense in cases where parents are financially unable to pay for such treatment.

C. To Meet the Need for More Insurance

The Commission recommends that the state encourage in every practicable way the development of group medical care plans which make it possible for people to insure themselves against expensive illness, expensive treatment by specialists, and extended hospitalization. The Blue Cross plan of hospital and surgical service, with some modifications, can meet the needs of that part of the state's population able to pay all their medical care costs. It is recommended that these Blue Cross organizations be asked to expand their services to include the general practitioner and prescribed drugs. This is particularly important for rural people who depend so heavily on the general physician. *The importance of insurance for hospital and medical care in a general program such as ours can hardly be overestimated. Every citizen needs to realize that it is just as important to have insurance against sickness-disasters as against fire-disasters.*

Conclusion

In conclusion we would say that no claim is made that this is a complete or perfect program. The wisdom of the General Assembly must fill in many gaps. The physicians, press and people of the state who have so generously proffered their interest and support—all are asked to help in remedying defects and improving details. We ask only that all of us shall work together to make real a new ideal of democracy—*"The equal right of every person born on earth to needed medical and hospital care whenever and wherever he battles against Disease and Death."* And to this end we would say:

1. The family that can pay its way will do so—yet the burden on even these families should be eased through health-and-hospital insurance.

2. The family that can partly pay its way will pay this part (likewise helped by insurance to the fullest possible degree); government and philanthropic aid being provided for the remainder.

3. The family that poverty, illness, or other misfortune has left honestly incapable of paying anything for its fight against disease will nevertheless be helped to an equal chance with the rest of us as it makes the same grim battle against ever-

menacing Death which we must all make and see our loved ones make sooner or later.

Signed on behalf of the State Hospital and Medical Care Commission,

CLARENCE POE, *Chairman*
CARL V. REYNOLDS, M.D., *Secretary*

P. P. MCCAIN, M.D., *Chairman, Four-Year Medical School for University and Hospital Facilities*
THOMAS J. PEARSALL, *Chairman, Hospital and Medical Care for Our Rural Population*
CHARLES A. CANNON, *Chairman, Hospital and Medical Care for Our Industrial and Urban Population*
E. E. BLACKMAN, M.D., *Chairman, Special Needs of Our Negro Population*
JAMES W. VERNON, M.D., *Chairman, Mental Hygiene and Hospitalization*
W. M. COPPRIDGE, M.D., *Chairman, Hospital and Medical Care Programs in Other States*
C. HORACE HAMILTON, *Chairman, Statistical Data and Publications*

II

"A Program of Great Hope, of Almost Infinite Promise, and of Great Practicability"

(Chairman's Final Report to Governor Cherry and the General Assembly of 1945. Presented February 10, 1945.)

"A program of great hope, of almost infinite promise, and yet of great practicability!" With these opening words the Chairman of the North Carolina Hospital and Medical Care Commission forwarded to the Governor and General Assembly on February 10, 1945 1) his own final report and 2) reports of ten committees. Especially emphasized were 3) seven paragraphs summarizing the most remarkable declarations of various committee chairman, and 4) a genuinely amazing demonstration of what good hospital and medical care had accomplished in North Carolina orphanages—and might accomplish for all our people.

To His Excellency, Honorable R. Gregg Cherry
and the General Assembly of 1945

Gentlemen:—

A message of great hope, of almost infinite promise, and yet of great practicability.

Such I submit must be a summary of ten reports on general health conditions and hospital and medical care in North Carolina which I now have the honor to transmit to you.

Along with the report of the full Commission as adopted October 11, 1944, I now submit nine detailed reports from subcommittees appointed February 28, 1944, ably officered, on which both physicians and laymen have served with equal efficiency (with first the chairman and then the vice-chairman of each committee listed) as follows:

1. Hospital and Medical Care for Our Rural Population—Thos. J. Pearsall, Dr. G. M. Cooper.

2. Hospital and Medical Care for Our Industrial and Urban Population—Charles A. Cannon, Charles A. Fink.

3. Special Needs of Our Negro Population—Dr. E. E. Blackman, C. C. Spaulding.

4. Four-Year Medical School for University and Hospital Facilities—Dr. P. P. McCain, Josephus Daniels.

5. Mental Hygiene and Hospitalization—Dr. James W. Vernon, Bishop Clare Purcell.

6. Hospital and Medical Care Plans in Other States—Dr. W. M. Coppridge, R. G. Deyton.

7. A Schoolchild Health Program—Dr. George M. Cooper, Clyde A. Erwin.

8. An Enlarged Public Health Program for North Carolina—Dr. Carl V. Reynolds.

9. A Statistical and Graphic Summary of North Carolina Hospital and Medical Care Needs—Dr. C. Horace Hamilton.

It is the opinion of such experts as State Health Officer Dr. Carl V. Reynolds that we here present the most comprehensive analysis and review ever yet undertaken of the medical and hospital needs of all our North Carolina people—urban and rural, white and black—and that such data will be invaluable in formulating all policies for better health conditions in North Carolina for years to come.

Ideals With Practicability

"Hitch your wagon to a star," said Emerson—meaning that practical men should yet have ideals.

"Hitch your star to a wagon," says Dr. Arthur E. Morgan—meaning that in order to be a working success, every ideal must be tied to earth and to everyday practicability.

Both these fine principles have been kept in mind by all 50 members of your Hospital and Medical Care Commission. Every member has ideals—but every member has also shown capacity for translating his ideals into practical achievement. And we have brought you a program which is intended to meet the hard tests of practicability which North Carolina Governors and Legislatures have always mixed with their idealism.

Four Pertinent Questions Asked

From the time the North Carolina Hospital and Medical Care Commission was organized in February, 1944, to report tentatively to Governor Broughton in October and finally to Governor Cherry and the General Assembly of 1945, we have sought to anticipate the four main questions you would expect your Commission to answer:

1. *What are present hospital and medical care conditions in North Carolina? Is a change, a great change, seriously needed?*
2. *If this is established as a fact, has a practicable program for making the change been developed?*
3. *Are the costs reasonable when compared with the results to be achieved?*
4. *Can you not only cite statistical proofs and thoroughly competent judgment, but is there some specific example right here in North Carolina where the proposed program has been translated into human-interest, flesh-and-blood Tar Heel terms, and if so, with what result?*

Three Questions Answered

Answering at once the first three questions, permit us to say—

1. *As to the need for change and improvement,* our committees have found that among the 48 states of the Union North Carolina is—

—45th in number of doctors per 1,000 population

—42nd in number of hospital beds per 1,000 population

And mainly as a result, we believe, of these two conditions as cause and effect our committees also report that North Carolina is—

—With respect to *infants*—39th in percentage of infants dying under one year of age (only 9 of the 48 states making a worse showing)

—With respect to *women*—41st in percentage of mothers dying in childbirth (only 7 of the 48 states making a worse showing)

—With respect to *men*—48th in percentage of army rejections for physical defects by latest available data (no state with a poorer showing)

(Precise percentage of rejections: April, 1942-March, 1943, *48.1%;* February-August, 1943, *56.8%*.)

Doctors Approve Program

2. *As for the practicability of the program* advocated by your Hospital and Medical Care Commission, we need only say that the best judges should be our North Carolina doctors themselves . . . and that of 65 county medical societies that have exhaustively examined the complete program since it was announced October, 1944, the vote (as reported to Secretary R. D. McMillan) has been:

Approving the program in entirety *55*
Approving in part *8*
Disapproving the program *2*

Costs Low Compared to Benefits

3. *As to costs,* in view of the hundreds of millions North Carolina has spent for roads and schools, the $5,000,000 the Legislature is asked to appropriate for a statewide Hospital Building Fund is astonishingly small. Both the Federal government and our own North Carolina counties, cities and towns will almost surely supplement heavily all the aid the State may provide for hospital building. For the indigent sick in hospitals the 3½ million people of North Carolina combined are now asked to provide only as much ($1 a day) as one deceased North Carolinian (James B. Duke) gives them constantly through his will. All other costs in the proposed program we believe are equally reasonable.

Question Number 4 Brings Great Hope

As proud North Carolinians, let us say to your Excellency, Governor Cherry, and the honored members of our House and Senate, it has been no pleasure to your Commission to recite the proof that North Carolina so desperately needs *"More Doctors, More Hospitals, More Insurance."*

When, however, we come to your fourth question, "Can you cite us an example where this proposed program has been translated into human-interest, flesh-and-blood Tar Heel terms . . . and if so, with what results?" then a great sunrise of hope and inspiration breaks upon the whole scene.

One of the most honored members of your Commission, Dr. J. G. Greer, as spokesman for the numerically largest religious denomination in North Carolina and its oldest social service agency, the Baptist Orphanage at Thomasville, N. C., reveals what can be done not only with our average North Carolina stock, but even with young North Carolinians who have been more-than-normally handicapped by

poverty—our orphans. First, let us repeat our earlier figures—48.1 and 56.8—as the percentage of army rejections of North Carolina draftees . . . and then let's listen to this officially signed report by Mr. I. G. Greer, superintendent of the Thomasville Baptist Orphanage, who wrote us February 9, 1945:

> *"Sometime ago you asked me to verify a statement I made to you regarding boys in service who grew up here in the Orphanage. At the time I think I told you we had 284 boys in uniform and that only 3 had failed to pass the physical examination. We know now that we have 318 in the service, and only 3 have failed to pass the physical examination—less than 1%."*

"Nor do our Baptist Orphanages differ from other North Carolina orphanages in this respect. From the superintendents of four other white orphanages I have just received data, making a total showing for boys of draft age who have been in these institutions as follows:

	Accepted for Service	*Rejected*
Baptist Orphanages (Mills and Kennedy)	*318*	*3*
Methodist Orphanage, Raleigh	*150*	*1*
Children's Home (Methodist), Winston-Salem	*225*	*2*
Barium Springs Orphanage (Presbyterian)	*220*	*5*
Oxford Orphanage	*225*	*5*
Totals	*1,138*	*16*

"This shows 1.4% army rejections, and with 1,873 children now in these orphanages there have been only 7 deaths in five years.

"Practically every child who enters our orphanages comes to us undernourished and in need of some kind of medical attention. This combined North Carolina orphanage record of 98.6% army-acceptance shows what might be done for both the children and older people all over North Carolina through improved medical and hospital care if the General Assembly approved such a program of 'More Doctors, More Hospitals, More Insurance' as the State's Hospital and Medical Care Commission is now advocating. If at any time you can use this statement in helping advance this much needed legislation, you have my permission."

The boys in our North Carolina orphanages are not coddled. They are not given luxuries. They are given sound nutrition and the reasonably adequate medical and hospital care from school age on as advocated by Governor Cherry and your Commission—and what do we find? Whereas the State's latest reported percentage of army rejections is 56.8 (and when the writer's youngest son went to Fort Bragg with 52 boys from your capital city, he was one of only 18 accepted) a not-expensive program of hospital and medical care provided for North Carolina orphanage boys of draft age brings an army acceptance of 98.6%!

North Carolina Can Become Famous For Low Death Rate

Deliberately as a result of a year-long study of all the data, good and bad, I would say this:

North Carolina has an almost ideal climate—seldom zero in winter or 100 in summer—and we have a remarkably sturdy middle-class population, free alike from dissipations of the idle rich and the physical deterioration of poverty-cursed slums. For these reasons of fine climate, fine physical stock, and freedom from extreme wealth and blighting poverty, our death rate has been amazingly low in spite of the absence of proper hospital and medical care.

With proper medical examination and treatment for all school children and proper hospital and medical care for all our older people, I believe that North Carolina can become nationally and even internationally famous for having the lowest death rate of any state of equal population in the American Union—with all that this would mean in increased efficiency, happiness and pride for all North Carolinians!

It is to such an inspiring opportunity for carrying North Carolina forward through adequate legislation in 1945 and 1947 that your North Carolina Hospital and Medical Care Commission presents its case!

Seven Highlights of Ten Reports

Just one more question I can hear His Excellency, the Governor, and busy members of the House and Senate asking as follows:

"Every one of your Commission Reports deserve detailed study, but in every article some one statement or paragraph stands out above all else. From all your Commission Reports suppose you had to pick out seven or eight paragraphs which you think every legislator should resolve to read, re-read and remember, no matter what else he might read or miss reading, what paragraphs would you select?"

This is perhaps the hardest of all four questions to answer but here would be my selections:

I. Farmers Need More Doctors, More Hospitals

It is upon our farm people that the lack of doctors and lack of hospitals falls most heavily. It is heavy in cost of medical service . . . in inability to get medical attention . . . in unnecessarily prolonged illnesses . . . in unnecessary deaths. In 34 North Carolina counties—all rural counties of course—there is now not a single hospital bed for anybody, white or black! In the matter of doctor shortage we note—

—The American standard is.....1 for each 1,000 people
—Urban North Carolina, 1940, had 1 for each 613 people
—Rural North Carolina, 1940, had 1 for each 3,613 people
—Rural North Carolina, 1944, had 1 for each 5,174 people

II. Industrial Workers Need the Program

The most praiseworthy "hospital insurance" plan, in effect in various North Carolina industries, has increased the demand for hospital care where the insured workers live . . . and should be expanded to cover not only industrial employees

but other citizens. As a physician in a presumably typical Piedmont industrial small town testifies: "The share-croppers of Eastern Carolina are not the only people who urgently need better care. The factory workers and Negroes of this section are in need, too. Except during rare periods of prosperity, only about one-half of the people of this community are able to pay the modest fees we charge."

III. School Children Need Examination and Treatment

The need to examine and correct the defects of all school children—at private expense where possible and at public expense where necessary—as emphasized by Governor Cherry, is plain and urgent. After Pearl Harbor the State had compulsory examinations of all boys in the two upper grades and the percentage of those showing some defects was amazing—

—85% had dental defects
—16% defective in vision
—16% were underweight
—14% had diseased tonsils, etc.

A majority of the children examined in pre-school clinics each year are also found to have some defect.

A strict system of annual inspection of every school child enrolled in the schools of every county must be provided under the leadership of the State Board of Health co-operating with city and county health departments.

IV. Negroes Need Doctors, Hospitals, Insurance

The Negro death rate in North Carolina in 1940 was 146% that of the white death rate—an appalling difference . . . The State's Negro population in 1940 was 983,574 (and now probably exceeds 1,000,000) but the State has only 129 active Negro physicians—or 1 for each 7,783 Negro people . . . and only 7,760 hospital beds, or 1.7 hospital beds for each 1,000 Negroes—less than half the American standard . . . A regional Negro Medical School should be established . . . Hospital associations should be encouraged to extend the Blue Cross program to Negroes.

V. Why a Four-Year Medical School Is Needed

Average number of physicians who die or retire in North Carolina each year—50. Average need for new physicians in order to maintain present ratio approximates—100 each year. Average number of medical students graduated from North Carolina medical schools each year who are residents of North Carolina: about 65 (Duke, 20; Wake Forest, 45). The State thus needs 50% more new North Carolina doctors each year than these two excellent schools have provided.

VI. A Statewide Psychiatric Program Is Needed

Mental disorder is more prevalent than tuberculosis and poliomyelitis, and its total cost to the State is as great as all other diseases combined, yet little attention

is paid to it. Now perhaps something may be done . . . From 40 to 70% of the average physician's practice is devoted to the diagnosis and treatment of disorders at least partly psychiatric in nature . . . By using the psychiatric unit of the proposed Four-Year Medical School as a "receiving hospital" and establishing one other such "receiving hospital" in the State, we can decrease the number of patients in hospitals for the insane, prevent many patients from becoming permanent wards of the State, and ultimately make a vast financial saving for the State . . . Every county hospital should also have a small number of beds (5 to 10) for psychiatric patients . . . Unless psychiatric care permeates through the entire state system of hospital care in this way, North Carolina will be sorely neglecting one of its largest problems.

VII. Types of Hospital and Health Centers Needed

A large Central Hospital of approximately 600 beds . . . A small number of District Hospitals of approximately 100 beds . . . Small Rural Hospitals of approximately 60 beds . . . Some counties with less than 12,500 population might find it practical to build small 20- or 30-bed hospitals . . . There should also be "Health Centers" in small rural communities, including diagnostic and laboratory services, facilities for minor operations, obstetrical service, and a small number of beds for cases not requiring the specialized services of a larger hospital, these health centers also to be used by the public health service in carrying on its work.

In Conclusion

In conclusion, I wish to express my thanks to all the members of the Hospital and Medical Care Commission who have labored with me in finding and interpreting the facts and in seeking to present a sound and reasonable program—"To the Good Health of All North Carolina." To my constant co-laborer, President Paul F. Whitaker of the State Medical Society, the State owes more than it will ever know. And finally the thanks of all the people are due to the two Governors under whom we have labored—to Ex-Governor J. M. Broughton who acted with characteristically prompt and adequate statesmanship when the State Medical Society appealed for State action . . . and to Governor R. Gregg Cherry who not only cheered us by immediate and vigorous endorsement of our efforts the day after your Commission was appointed but enriched and rounded out our program by his statesmanlike insistence that any campaign for "Better Health in North Carolina" must begin with the boys and girls in our public schools and must equally safeguard the health and future of the child of the rich and the child of the poor.

Respectfully submitted,

Clarence Poe

Chairman.

Raleigh, N. C.
February 10, 1945.

III

Here's How 1)Our State Ranks Among the States . . . and 2)Your County Among the Counties

(Charts and Statistics to Illustrate Medical and Hospital Needs of Our North Carolina People. Prepared by Dr. C. Horace Hamilton, Head Rural Sociology, N. C. State College.)

"Just how does North Carolina rank among the states in all important features of hospital and medical care? Just how does my county rank among the counties?" To answer these often-asked questions Dr. C. Horace Hamilton, Head of Rural Sociology Department, North Carolina State College, and chairman of our Committee on Statistical Studies, prepared an invaluable set of tables and charts. Some of the most important (revised to include the latest available data as of February 1, 1947, wherever possible) are shown on the following pages with explanatory comments by Dr. Hamilton.

How North Carolina Ranks In Health and Medical Care and In Social and Economic Conditions Affecting Health.*

SUBJECTS	Average or Percentage United States	Average or Percentage North Carolina	North Carolina Rank
HEALTH AND MEDICAL CARE			
Hospital beds per 10,000 population	35	23	42
Days hospitalization per 100 population	90	52	44
Doctors per 100,000 population	125	72	45
White doctors per 100,000 white population	136	94	41
Nonwhite doctors per 100,000 Nonwhite population	28	17	30
Dentists per 100,000 population	58	22	43
White dentists per 100,000 population	58	28	46
Nonwhite dentists per 100,000 nonwhite population	12	6	34
Nurses (including students) per 100,000 population	270	175	38
White nurses per 100,000 white population	295	226	30
Nonwhite nurses per 100,000 nonwhite population	54	46	25
Percentage live births in hospitals (1942)	67.9	38.1	41
Percentage white births in hospitals (1942)	72.7	49.0	41
Percentage Negro births in hospitals (1942)	28.9	13.6	43
Percentage urban (over 10,000) births in hospitals	80.5	55.9	44
Percentage rural (under 10,000) births in hospitals	36.5	17.1	39
Percentage of live births with no medical attendant (1942)	7.4	20.7	40
Percentage of white births with no medical attendant (1942)	2.5	6.1	40
Percentage of Negro births with no medical attendant (1942)	46.8	54.0	40
Percentage of urban births with no medical attendant (1942)	2.6	10.0	40
Percentage of rural births with no medical attendant (1942)	14.2	24.7	39
Maternal deaths per 1,000 live births	3.8	5.1	41
Rural maternal deaths per 1,000 live births	4.0	4.9	38
Nonwhite maternal deaths per 1,000 live births	7.7	7.6	31
Infant deaths plus stillbirths per 1,000 births	76	89	38
White infant deaths plus stillbirths per 1,000 births	69	74	35
Nonwhite infant deaths plus stillbirths per 1,000 births	123	120	26
Mortality rate (per 1,000 population)†	7.56	8.12	38
White mortality rate (per 1,000 population)†	7.02	6.72	15
Nonwhite mortality rate (per 1,000 population)†	13.14	12.25	21
Rural white mortality rate (per 1,000 population)†	6.18	6.40	32
Live births per 1,000 females 15-44 years of age	73.7	90.0	14
White births per 1,000 females 15-44 years of age	72.5	85.4	14
Nonwhite births per 1,000 females 15-44 years of age	83.3	101.6	11
POPULATION			
Population per square mile	44.2	72.7	35
Rural population per square mile	19.2	52.9	39
Farm people per square mile farm land	18.4	56.4	48
Percentage of population living on farms	22.9	46.4	43
Percentage of population living in rural areas	43.4	72.7	43
Percentage of population which is Negro	9.8	27.5	43
Percentage of employed males over 14 years of age engaged in agriculture	23.2	41.4	37
People under 15 and over 65 per 1,000 people between 15 and 65	468	585	43
Total number of people in 1,000's	131,669	3,572	11
Percentage of population increase, 1930 to 1940	7.0	12.7	9
INCOME AND LEVEL OF LIVING			
Net income per capita	$573	$317	44
Average value of dwellings	$2,503	$1,346	42

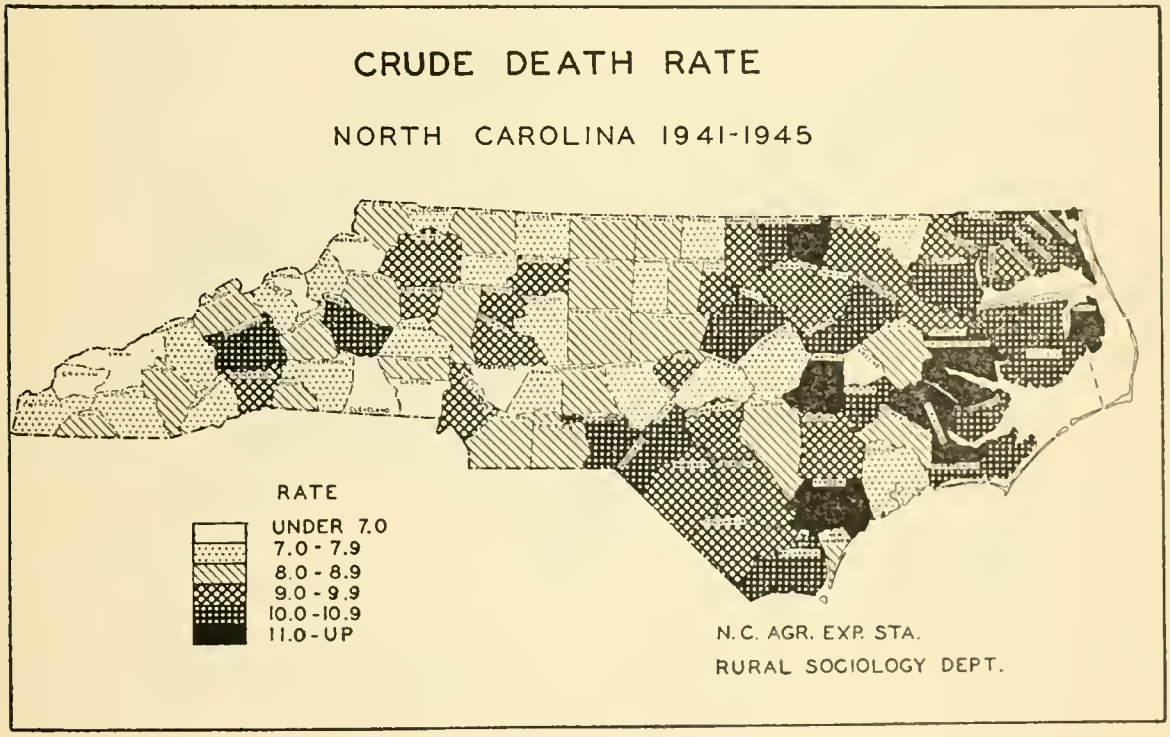
How North Carolina Ranks . . . Continued.

SUBJECTS	Average or Percentage United States	North Carolina	North Carolina Rank
Average value of farm homes	$1,070	$700	38
Percentage of home ownership	43.6	42.4	36
Average number (median) of people per home	3.3	4.0	48
Percentage of homes with more than one person per room	20.3	35.3	38
Percentage of homes with electricity	78.7	54.4	38
Percentage of homes with radios	82.8	61.8	41
Percentage of homes with running water	69.9	39.1	41
Percentage of homes with mechanical refrigeration	44.1	28.2	38
Percentage of adults with less than 5th grade edueation	13.5	26.2	42
Rural-farm Level of Living Index	100	84	40
STATE AND COUNTY FINANCE			
Per capita State Government expenditures	$36.80	$26.96	38
Per capita State Government expenditures for public health	$ .37	$ .40	29
Per capita County Government expenditures, 1942	$12.09	$11.53	28
Percentage State and local tax collections are of total income payments	11.2	11.3	24
Percentage taxable income over $5,000 is of total income payments, 1938	9.9	6.2	30
Per capita Federal aid to states	$28.82	$20.78	43
Ratio (per $100) Federal aid to state and loeal tax colleetions	44.7	57.8	26

* These data are for the year 1940 unless otherwise stated.

† Excluding age groups under one and 75-up. Adjusted to the age distribution of the total United States population.

Sourее: Based largely on U. S. Census, reports of State Departments, American Medical Association Directory, and reports of special agencies concerned.

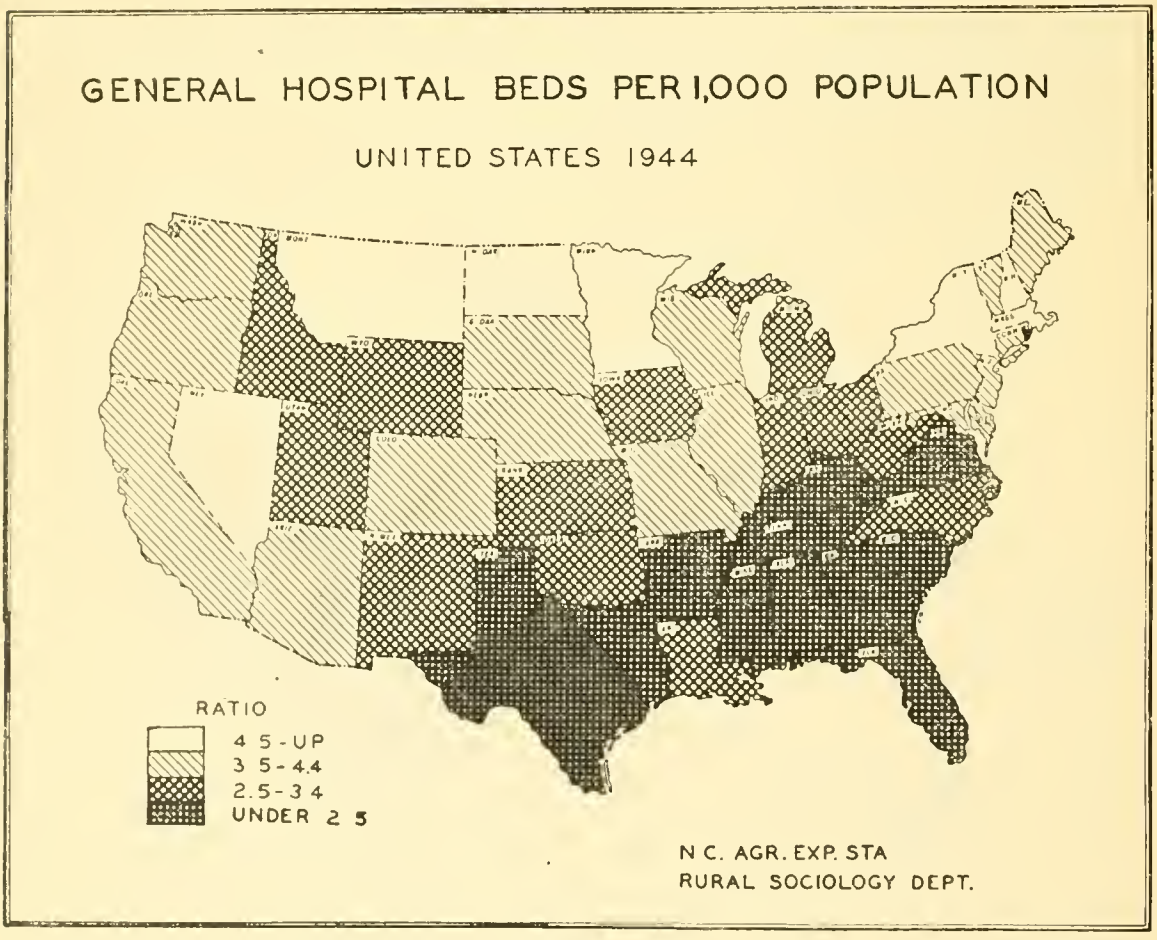


Inadequate Hospital Facilities and Personnel

In 1944, North Carolina had only 2.6 general and allied special hospital beds per 1,000 population. Only twelve states had fewer beds than North Carolina and the national average was 3.4 beds per 1,000 population. Seven states and the District of Columbia had more than 4.5 beds per 1,000 population, which is considered a reasonable standard if adequate hospital care is to be provided for every one.

Of the general hospital beds, *41.0 per cent are located in the six big urban counties* of the state; 30 counties have no hospital beds; 20 counties have less than 50 beds; 26 counties have from 50 to 99 beds; 14 counties have from 100 to 199 beds; and 10 counties have more than 200 beds.

Negro hospital facilities are seriously inadequate. We have now about 1,700 general hospital beds for Negroes and at least 2,800 more are needed to supply the recommended minimum of 4.5 beds per 1,000 population.



General and Allied Special Hospital Beds and Days Hospitalization, United States, 1944

BEDS PER 1000 POPULATION

Rank	State	Number of Beds
	UNITED STATES	3.40
1	Montana	6.25
2	Massachusetts	5.17
3	New York	4.85
4	North Dakota	4.79
5	Minnesota	4.77
6	New Hampshire	4.73
7	Nevada	4.62
8	District of Columbia	4.50
9	Delaware	4.37
10	Colorado	4.36
11	Arizona	4.22
12	Vermont	4.13
13	Washington	3.95
14	Wisconsin	3.94
15	Connecticut	3.93
16	Pennsylvania	3.92
17	Oregon	3.89
18	South Dakota	3.83
19	Nebraska	3.78
20	Illinois	3.76
21	Maine	3.75
22	Maryland	3.67
23	New Jersey	3.63
24	California	3.60
25	Missouri	3.59
26	New Mexico	3.40
27	Kansas	3.35
28	West Virginia	3.30
29	Wyoming	3.29
30	Utah	3.21
31	Iowa	3.19
32	Michigan	3.08
33	Idaho	3.07
34	Ohio	3.06
35	Louisiana	3.01
36	Indiana	2.82
37	*North Carolina*	*2.57*
38	Oklahoma	2.56
39	Florida	2.34
40	Rhode Island	2.24
41	South Carolina	2.33
42	Virginia	2.32
43	Texas	2.28
44	Tennessee	2.11
45	Kentucky	2.02
46	Georgia	1.95
47	Alabama	1.93
48	Arkansas	1.73
49	Mississippi	1.65

DAYS HOSPITALIZATION PER 100 POPULATION

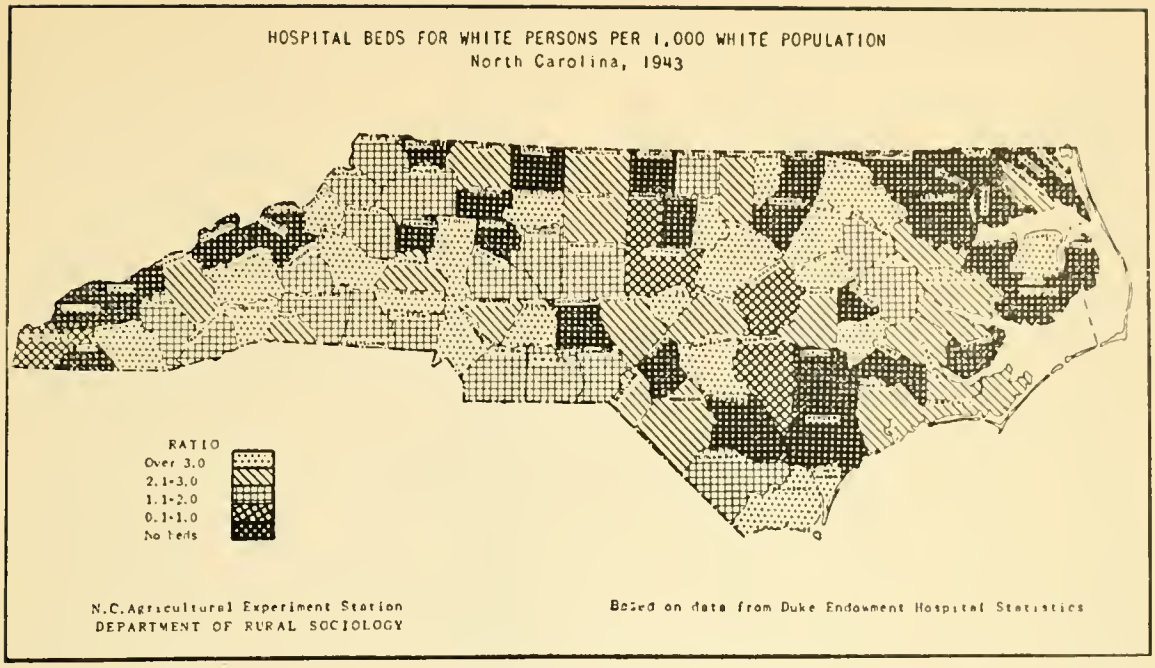
Rank	State	Number of Days
	UNITED STATES	90
1	Montana	151
2	Massachusetts	136
3	Minnesota	134
4	New York	132
5	North Dakota	126
6	District of Columbia	120
7	Vermont	114
8	New Hampshire	114
9	Nevada	109
10	Washington	109
11	Colorado	109
12	Wisconsin	106
13	Maine	106
14	Connecticut	105
15	Pennsylvania	103
16	Delaware	102
17	Illinois	102
18	Nebraska	100
19	Arizona	100
20	Oregon	100
21	South Dakota	99
22	California	98
23	Missouri	97
24	Maryland	96
25	New Jersey	94
26	Kansas	93
27	Ohio	88
28	Iowa	84
29	West Virginia	84
30	Michigan	83
31	Utah	80
32	Indiana	78
33	Louisiana	76
34	New Mexico	75
35	Wyoming	74
36	Idaho	71
37	Rhode Island	71
38	*North Carolina*	*65*
39	Oklahoma	59
40	Virginia	59
41	South Carolina	57
42	Tennessee	56
43	Texas	55
44	Florida	55
45	Kentucky	51
46	Georgia	49
47	Alabama	42
48	Arkansas	41
49	Mississippi	37

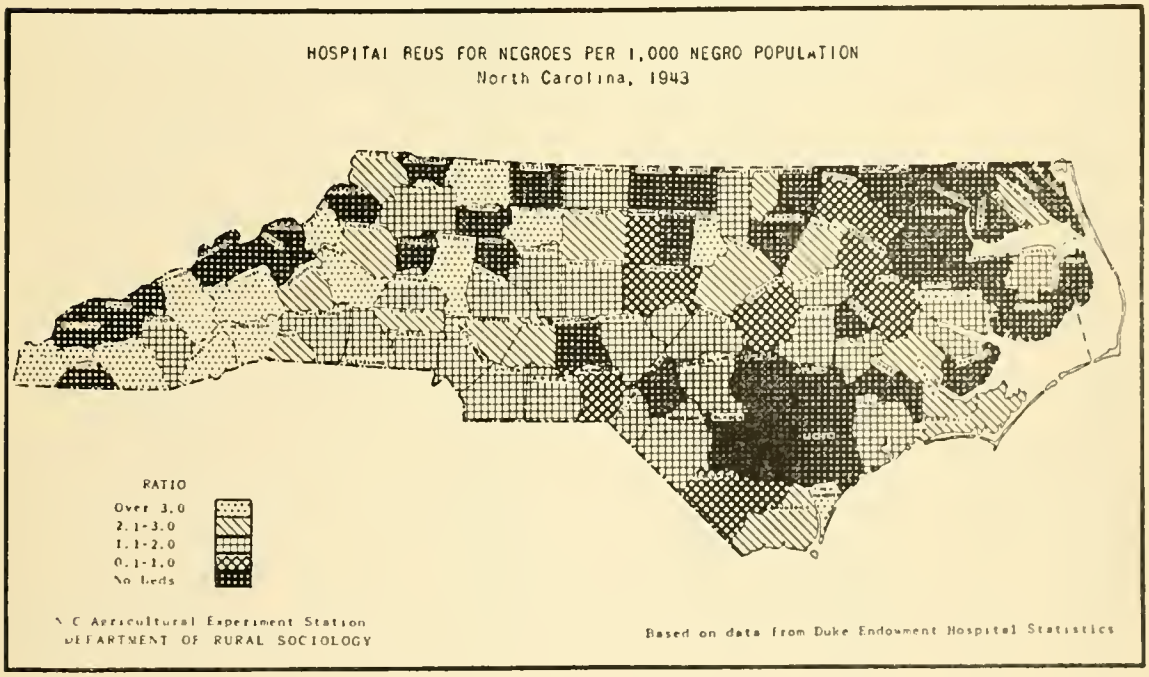
Source: *Journal of the American Medical Association*, March 31, 1945.
Population—Special Reports, Series P-45, No. 9, October 1, 1945.

Hospital Beds for White Persons Per 1,000 White Population, North Carolina, 1943*

County	*Rank*	*Ratio*	*Number Beds*
Alamance	64	.8	37
Alexander	No hospital beds		
Alleghany	No hospital beds		
Anson	47	1.7	24
Ashe	61	1.1	25
Avery	3	6.4	85
Beaufort	26	2.8	65
Bertie	No hospital beds		
Bladen	No hospital beds		
Brunswick	20	3.2	36
Buncombe	10	4.2	386
Burke	16	3.4	122
Cabarrus	38	2.1	106
Caldwell	49	1.6	53
Camden	No hospital beds		
Carteret	26	2.8	43
Caswell	No hospital beds		
Catawba	29	2.6	119
Chatham	62	1.0	17
Cherokee	62	1.0	18
Chowan	No hospital beds		
Clay	No hospital beds		
Cleveland	49	1.6	71
Columbus	44	1.9	59
Craven	38	2.1	36
Cumberland	12	4.0	156
Currituck	No hospital beds		
Dare	No hospital beds		
Davidson	55	1.3	64
Davie	No hospital beds		
Duplin	No hospital beds		
Durham	1	13.0	674
Edgecombe	42	2.0	46
Forsyth	4	6.2	526
Franklin	No hospital beds		
Gaston	49	1.6	118
Gates	No hospital beds		
Graham	No hospital beds		
Granville	33	2.3	33
Greene	No hospital beds		
Guilford	23	3.0	363
Halifax	21	3.1	77
Harnett	35	2.2	70
Haywood	38	2.1	70
Henderson	10	4.2	100
Hertford	No hospital beds		
Hoke	No hospital beds		
Hyde	No hospital beds		
Iredell	5	5.5	226
Jackson	58	1.2	23
Johnston	65	.6	30
Jones	No hospital beds		
Lee	21	3.1	41
Lenoir	14	3.9	91
Lincoln	12	4.0	84
McDowell	47	1.7	37
Macon	7	5.4	84
Madison	No hospital beds		
Martin	29	2.6	35
Mecklenburg	5	5.5	594
Mitchell	No hospital beds		
Montgomery	No hospital beds		
Moore	25	2.9	62
Nash	7	5.4	175
New Hanover	2	6.7	208
Northampton	No hospital beds		
Onslow	23	3.0	39
Orange	No hospital beds		
Pamlico	No hospital beds		
Pasquotank	32	2.5	30
Pender	No hospital beds		
Perquimans	No hospital beds		
Person	49	1.6	25
Pitt	55	1.3	42
Polk	33	2.3	24
Randolph	49	1.6	66
Richmond	49	1.6	40
Robeson	29	2.6	131
Rockingham	38	2.1	96
Rowan	45	1.8	99
Rutherford	58	1.2	47
Sampson	66	.3	9
Scotland	35	2.2	26
Stanly	18	3.3	96
Stokes	No hospital beds		
Surry	26	2.8	110
Swain	No hospital beds		
Transylvania	45	1.8	21
Tyrrell	9	4.8	17
Union	55	1.3	40
Vance	18	3.3	53
Wake	16	3.4	248
Warren	No hospital beds		
Washington	No hospital beds		
Watauga	42	2.0	35
Wayne	35	2.2	73
Wilkes	58	1.2	47
Wilson	15	3.7	107
Yadkin	No hospital beds		
Yancey	No hospital beds		

Source: *Duke Endowment Hospital Statistics.* * Based on 1940 population.


HOSPITAL BEDS FOR WHITE PERSONS PER 1,000 WHITE POPULATION
North Carolina, 1943
RATIO
Over 3.0
2.1-3.0
1.1-2.0
0.1-1.0
No beds
N.C.Agricultural Experiment Station
DEPARTMENT OF RURAL SOCIOLOGY
Based on data from Duke Endowment Hospital Statistics


HOSPITAL BEDS FOR NEGROES PER 1,000 NEGRO POPULATION
North Carolina, 1943
RATIO
Over 3.0
2.1-3.0
1.1-2.0
0.1-1.0
No beds
N C Agricultural Experiment Station
DEPARTMENT OF RURAL SOCIOLOGY
Based on data from Duke Endowment Hospital Statistics

Hospital Beds for Negroes Per 1,000 Negro Population, North Carolina, 1943*

County	Rank	Ratio	Number Beds
Alamance	60	.5	5
Alexander	No hospital beds		
Alleghany	No hospital beds		
Anson	51	1.1	16
Ashe	27	2.1	1
Avery	2	7.7	2
Beaufort	46	1.3	18
Bertie	No hospital beds		
Bladen	No hospital beds		
Brunswick	21	2.4	14
Buncombe	12	3.1	50
Burke	10	3.8	12
Cabarrus	19	2.5	24
Caldwell	19	2.5	7
Camden	No hospital beds		
Carteret	25	2.2	6
Caswell	No hospital beds		
Catawba	43	1.4	7
Chatham	58	.6	5
Cherokee	1	16.5	3
Chowan	No hospital beds		
Clay	No hospital beds		
Cleveland	40	1.7	22
Columbus	55	.9	13
Craven	15	2.8	39
Cumberland	31	1.9	39
Currituck	No hospital beds		
Dare	No hospital beds		
Davidson	43	1.4	8
Davie	No hospital beds		
Duplin	No hospital beds		
Durham	6	5.3	151
Edgecombe	58	.6	16
Forsyth	3	6.6	272
Franklin	No hospital beds		
Gaston	40	1.7	22
Gates	No hospital beds		
Graham	No hospital beds		
Granville	51	1.1	16
Greene	No hospital beds		
Guilford	21	2.4	76
Halifax	57	.7	23
Harnett	46	1.3	15
Haywood	4	5.6	5
Henderson	10	3.8	8
Hertford	No hospital beds		
Hoke	No hospital beds		
Hyde	No hospital beds		
Iredell	12	3.1	30
Jackson	36	1.8	1
Johnston	62	.4	5
Jones	No hospital beds		
Lee	40	1.7	9
Lenoir	50	1.2	22
Lincoln	16	2.7	9
McDowell	16	2.7	5
Macon	9	4.3	2
Madison	No hospital beds		
Martin	No hospital beds		
Mecklenburg	29	2.0	85
Mitchell	No hospital beds		
Montgomery	No hospital beds		
Moore	31	1.9	18
Nash	18	2.6	60
New Hanover	4	5.6	95
Northampton	No hospital beds		
Onslow	31	1.9	9
Orange	No hospital beds		
Pamlico	No hospital beds		
Pasquotank	27	2.1	18
Pender	No hospital beds		
Perquimans	No hospital beds		
Person	No hospital beds		
Pitt	60	.5	15
Polk	21	2.4	4
Randolph	36	1.8	8
Richmond	56	.8	10
Robeson	31	1.9	49
Rockingham	46	1.3	16
Rowan	43	1.4	18
Rutherford	36	1.8	11
Sampson	No hospital beds		
Scotland	51	1.1	13
Stanly	24	2.3	9
Stokes	No hospital beds		
Surry	8	4.7	12
Swain	No hospital beds		
Transylvania	7	4.8	4
Tyrrell	29	2.0	4
Union	51	1.1	10
Vance	25	2.2	30
Wake	14	3.0	110
Warren	No hospital beds		
Washington	No hospital beds		
Watauga	No hospital beds		
Wayne	46	1.3	33
Wilkes	36	1.8	5
Wilson	31	1.9	41
Yadkin	No hospital beds		
Yancey	No hospital beds		

Source: *Duke Endowment Hospital Statistics.* * Based on 1940 population.

Number of General and Allied Special Hospital Beds Needed and Available, and Additional Beds Needed by County and Community: One Plan for Consideration

COUNTY AND TOWN	NUMBER OF BEDS NEEDED[1]	NUMBER OF BEDS REPORTED[2]	ADDITIONAL BEDS NEEDED[3]
NORTH CAROLINA	15,674	9,326	6,778
Alamance: Burlington	191	45	146
Alexander: Taylorsville*	38	0	38
Alleghany: Sparta*	34	0	34
Anson: Wadesboro	110	40	70
Ashe: Jefferson	74	28	46
Avery: Total	65	90	0
Banner Elk	45	70	0
Crossnore*	20	20	0
Beaufort: Washington	160	91	69
Bertie: Windsor*	20	18	2
Bladen: Elizabethtown	69	0	69
Brunswick: Southport*	32	49	0
Buncombe: Total	926	403	523
Asheville	902	379	523
Candler*	24	24	0
Burke: Total	132	155	0
Morganton	85	108	0
Valdese*	47	47	0
Cabarrus: Concord	191	163	28
Caldwell: Lenoir	104	56	48
Camden[4]	0	0	0
Carteret: Morehead City	71	48	23
Caswell: Yanceyville*	36	0	36
Catawba: Total	187	134	53
Hickory	126	88	38
Newton	61	46	15
Chatham: Siler City	65	19	46
Cherokee: Murphy	110	28	82
Chowan: Edenton	57	45	12
Clay: Hayesville*	20	0	20
Cleveland: Shelby	129	99	30
Columbus: Whiteville	141	60	81
Craven: New Bern	139	132	7
Cumberland: Fayetteville	673	205	468
Currituck: Currituck*	20	0	20
Dare: Manteo*	19	0	19
Davidson: Total	156	78	78
Lexington	91	26	65
Thomasville	65	52	13
Davie: Mocksville	65	0	65
Duplin: Wallace	84	0	84
Durham: Durham	652	861	0
Edgecombe:[5] Tarboro	92	71	21
Forsyth: Winston-Salem	1,036	696	340
Franklin: Louisburg	118	0	118
Gaston: Gastonia	255	118	137
Gates: Gatesville*	20	0	20
Graham: Robbinsville*	32	0	32
Granville: Oxford	83	52	31
Greene: Snow Hill*	20	0	20
Guilford: Total	695	450	245

COUNTY AND TOWN	Number of Beds Needed[1]	Number of Beds Reported[2]	Additional Beds Needed[3]
Greensboro	513	328	185
High Point	182	122	60
Halifax: Total	236	114	122
Roanoke Rapids	146	114	32
Seotland Neek	90	0	90
Harnett: Dunn-Erwin	142	85	57
Haywood: Waynesville	119	75	44
Henderson: Total	145	112	33
Fleteher[6]	65	65	0
Hendersonville	80	47	33
Hertford: Ahoskie	92	50	42
Hoke: Raeford	73	0	73
Hyde: Swan Quarter*	23	0	23
Iredell: Total	189	238	16
Mooresville	76	60	16
Statesville	113	178	0
Jackson: Sylva	48	25	23
Johnston: Smithfield	116	30	86
Jones: Trenton*	20	0	20
Lee: Sanford	97	53	44
Lenoir: Kinston	414	132	282
Lincoln: Lincolnton	80	93	0
McDowell: Marion	67	41	26
Macon: Franklin	61	96	0
Madison: Marshall	85	0	85
Martin: Williamston	65	35	30
Mecklenburg: Charlotte	941	953	0
Mitchell: Spruce Pine	60	0	60
Montgomery: Troy	60	0	60
Moore: Pinehurst	97	80	17
Nash: Rocky Mount	557	204	353
New Hanover: Wilmington	572	427	145
Northampton: Jaekson*	20	0	20
Onslow: Jacksonville	96	55	41
Orange: Chapel Hill	400	0	400
Pamlieo: Bayboro*	20	0	20
Pasquotank: Elizabeth City	225	94	131
Pender: Burgaw*	20	0	20
Perqnimans: Hertford*	20	0	20
Person: Roxboro	76	16	60
Pitt: Greenville	190	65	125
Polk: Tryon	68	28	40
Randolph: Asheboro	100	79	21
Richmond: Hamlet	150	94	56
Robeson: Total	163	180	0
Fairmont*	25	25	0
Lumberton	138	155	0
Rockingham: Total	188	124	64
Leaksville	99	50	49
Reidsville	89	74	15
Rowan: Salisbury	163	149	14
Rutherford: Rutherfordton	96	64	32
Sampson: Total	117	7	110
Clinton	117	0	107
Roseboro*	10	7	3

COUNTY AND TOWN	Number of Beds Needed[1]	Number of Beds Reported[2]	Additional Beds Needed[3]
Scotland: Laurinburg	92	64	28
Stanly: Albemarle	108	89	19
Stokes: Danbury	57	0	57
Surry: Total	168	135	33
Elkin	63	60	3
Mount Airy	105	75	30
Swain: Bryson City*	27	0	27
Transylvania: Brevard	57	25	32
Tyrrell: Columbia*	26	21	5
Union: Monroe	111	53	58
Vance: Henderson	126	89	37
Wake: Raleigh	544	455	89
Warren: Warrenton	81	5	76
Washington: Plymouth*	20	0	20
Watauga: Boone	51	28	13
Wayne: Goldsboro	263	126	137
Wilkes: North Wilkesboro	80	54	26
Wilson: Wilson	231	152	79
Yadkin: Yadkinville*	20	0	20
Yancey: Burnsville*	20	0	20

[1]Tentative estimates by the Department of Rural Sociology, North Carolina Agricultural Experiment Station, based on probable hospital service areas and on the establishment of regional hospital centers. The need for hospital beds has been related to average birth and death rates in the areas concerned. Population figures are for the year 1943.

[2]As reported in use in 1946.

[3]Does not include beds that need replacement or hospitals that need to be reconstructed or relocated. Includes beds for county and other health centers.

[4]Served by Elizabeth City.

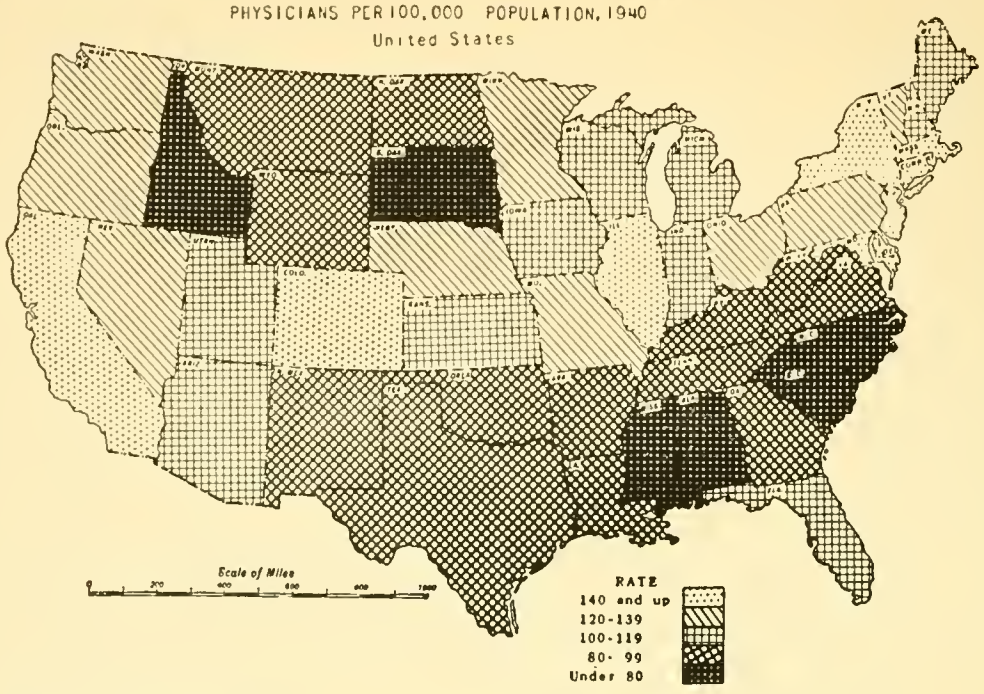
[5]See, also, Rocky Mount in Nash County.

[6]Includes some TB beds.

*Health center or community clinic.

PHYSICIANS PER 100,000 POPULATION, 1940

United States

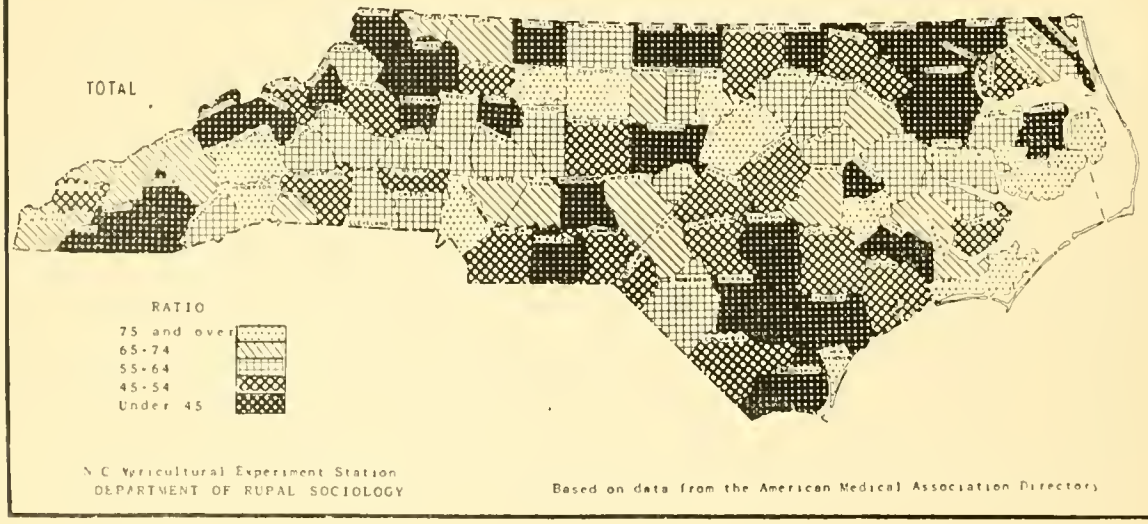


N.C. Agricultural Experiment Station
DEPARTMENT OF RURAL SOCIOLOGY

Based on data from the U.S. Bureau of the Census

PHYSICIANS PER 100,000 POPULATION

North Carolina, 1940



N.C. Agricultural Experiment Station
DEPARTMENT OF RURAL SOCIOLOGY

Based on data from the American Medical Association Directory

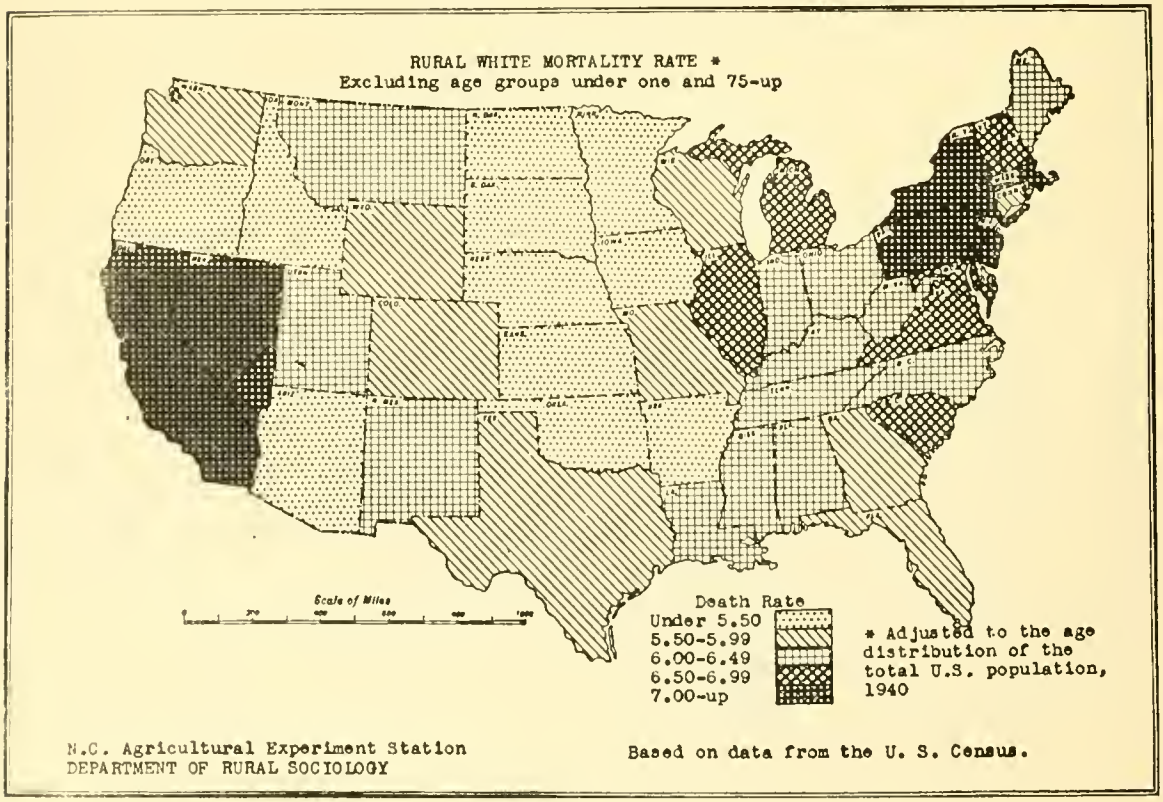
Total Physicians and Surgeons, and Nurses Per 100,000 Total Population, 1940

PHYSICIANS AND SURGEONS			TRAINED NURSES AND STUDENT NURSES		
Rank	State	Ratio	Rank	State	Ratio
	UNITED STATES	125		UNITED STATES	270
1	District of Columbia	262	1	District of Columbia	569
2	New York	193	2	Massachusetts	488
3	Massachusetts	164	3	Connecticut	443
4	Maryland	161	4	New Hampshire	403
5	California	158	5	New York	398
6	Colorado	146	6	California	395
6	Illinois	146	7	Maryland	350
8	Connecticut	145	7	Vermont	350
9	New Jersey	141	9	Minnesota	341
10	Missouri	132	10	Delaware	339
11	Nevada	130	10	New Jersey	339
11	Ohio	130	12	Colorado	333
11	Pennsylvania	130	13	Washington	329
11	Rhode Island	130	14	Oregon	327
15	Oregon	128	15	Rhode Island	313
15	Vermont	128	16	Maine	302
17	Delaware	125	17	Arizona	298
18	Minnesota	122	18	Montana	296
19	Nebraska	120	19	Illinois	289
19	Washington	120	20	Pennsylvania	284
21	Michigan	117	21	Ohio	267
22	Iowa	115	22	Michigan	263
22	Kansas	115	23	Wisconsin	256
24	New Hampshire	114	24	Nevada	251
25	Indiana	113	25	Florida	250
26	Arizona	112	26	Utah	242
27	Florida	108	27	North Dakota	236
27	Wisconsin	108	28	Kansas	219
29	Maine	105	29	Iowa	216
30	Utah	100	29	Missouri	216
31	Louisiana	99	29	Nebraska	216
32	Virginia	98	32	South Dakota	213
33	Texas	97	33	Virginia	210
34	Oklahoma	96	34	Indiana	209
35	Montana	94	35	Idaho	203
35	Tennessee	94	36	Wyoming	202
37	West Virginia	91	37	Louisiana	181
38	Wyoming	90	38	Texas	176
39	Kentucky	89	*39*	*North Carolina*	*175*
40	Arkansas	86	40	West Virginia	161
41	Georgia	82	41	South Carolina	160
42	New Mexico	80	42	Tennessee	159
42	North Dakota	80	43	New Mexico	152
44	Idaho	78	44	Georgia	145
44	South Dakota	78	45	Oklahoma	134
46	*North Carolina*	*72*	46	Kentucky	131
47	Alabama	66	47	Alabama	118
47	South Carolina	66	48	Arkansas	96
49	Mississippi	61	49	Mississippi	92

Source: United States Census, 1940.

North Carolina's Death Rate: Sound vs. Unsound Data

One of the most misunderstood of all statistics regarding North Carolina is that dealing with our *average* death rate. Many sincere but misinformed people have said, "Well, North Carolina's health and hospital conditions must not be bad because our *average death rate* is one of the best in America." This is true only because of our astonishingly high birth rate and our consequent excessive proportion of children. Actually if we compare 1,000 people *in each age group* from 1 year to 75 years in North Carolina with 1,000 people in the *same age groups* in the United States as a whole, North Carolina is often not among the dozen best states in average death rate, nor the second best, nor the third best, but often among the worst 12 states in the Union! In other words, in states having much higher-than-average birth rates, the age level of the population is so low that the unadjusted death rate is spuriously low and misleading. In such states, "age-adjusted death rates" afford the only fair basis for comparison with other states.



Adjusted Mortality Rates Per 1,000 Population, 1940*

Excluding age groups under one and 75-up.

TOTAL			NONWHITE			RURAL WHITE		
Rank	State	Rate	Rank	State	Rate	Rank	State	Rate
29	United States	7.56	27	United States	13.14	27	United States	6.18
1	Nebraska	5.65	1	Vermont	1.59	1	Iowa	4.61
2	Iowa	5.68	2	Maine	5.66	2	Arizona	4.62
3	North Dakota	5.72	3	New Mexico	6.83	3	Kansas	4.82
4	South Dakota	5.75	4	Utah	10.00	4	Oregon	4.89
5	Minnesota	5.78	5	Arkansas	10.26	5	Nebraska	4.92
6	Kansas	5.85	6	California	10.32	6	South Dakota	4.93
7	Wisconsin	6.22	7	Kansas	10.72	7	Oklahoma	4.95
8	Oregon	6.59	8	Nebraska	10.86	8	North Dakota	5.15
9	Oklahoma	6.60	9	Arizona	10.89	9	Minnesota	5.21
10	Idaho	6.68	10	Oklahoma	11.10	10	Arkansas	5.30
11	Maine	6.78	11	Iowa	11.12	11	Idaho	5.38
12	Utah	6.83	12	Massachusetts	11.18	12	Missouri	5.54
13	Wyoming	6.84	13	Connecticut	11.41	13	Texas	5.61
14	New Hampshire	6.85	14	Minnesota	11.52	14	Florida	5.73
15	Colorado	6.94	15	Idaho	11.74	15	Wyoming	5.74
16	Vermont	6.96	16	Mississippi	11.92	16	Wisconsin	5.76
17	Washington	7.01	17	Colorado	11.93	17	Connecticut	5.80
18	Connecticut	7.02	18	Texas	12.00	17	Washington	5.80
19	Missouri	7.04	19	North Dakota	12.18	19	Georgia	5.91
20	Indiana	7.07	20	Montana	12.19	20	Colorado	5.93
20	Michigan	7.07	*21*	*North Carolina*	*12.25*	21	Louisiana	6.07
22	Montana	7.16	22	South Dakota	12.28	21	New Mexico	6.07
23	Massachusetts	7.19	23	Louisiana	12.63	23	Mississippi	6.11
24	Arkansas	7.20	23	Oregon	12.63	23	Montana	6.11
25	Ohio	7.26	25	Michigan	12.69	25	Kentucky	6.13
26	California	7.34	26	New York	12.94	26	Indiana	6.14
27	West Virginia	7.40	27	Wisconsin	13.08	27	Delaware	6.18
28	Rhode Island	7.45	28	Indiana	13.31	28	Tennessee	6.21
29	Kentucky	7.55	29	Alabama	13.37	29	West Virginia	6.28
30	Texas	7.59	30	Washington	13.45	30	Ohio	6.33
31	New Mexico	7.64	31	Ohio	13.82	31	Maine	6.36
32	Illinois	7.75	32	Tennessee	13.93	32	Alabama	6.40
33	New York	7.79	33	New Jersey	13.95	*32*	*North Carolina*	*6.40*
34	New Jersey	7.88	34	Georgia	14.06	34	Utah	6.43
35	Pennsylvania	7.98	34	Missouri	14.06	35	Vermont	6.51
36	Delaware	8.03	34	West Virginia	14.06	36	Michigan	6.53
37	Tennessee	8.04	37	Kentucky	14.10	36	South Carolina	6.53
38	*North Carolina*	*8.12*	38	Rhode Island	14.40	38	New Hampshire	6.55
39	Florida	8.65	39	Pennsylvania	14.48	39	Illinois	6.56
40	Maryland	8.72	40	Illinois	14.79	39	Virginia	6.56
41	Virginia	8.83	41	South Carolina	14.89	41	Rhode Island	6.80
42	Arizona	8.84	42	Virginia	14.91	42	Maryland	6.89
43	Mississippi	9.05	43	Florida	15.00	43	Massachusetts	7.00
44	Alabama	9.08	44	Wyoming	15.21	44	California	7.24
45	Georgia	9.16	45	Maryland	15.31	45	Pennsylvania	7.35
46	Nevada	9.27	46	Delaware	15.35	46	New York	7.42
47	Louisiana	9.34	47	Nevada	16.95	47	Nevada	7.88
48	South Carolina	10.28	48	New Hampshire	17.57	48	New Jersey	7.94

* Adjusted to the age distribution of the total United States population.
Source: U. S. Census.

Infant and Maternal Mortality Rates, United States, 1944

MATERNAL DEATHS PER 1,000 LIVE BIRTHS

Rank	State	Infant Deaths
	United States	*39.8*
1	Oregon	30.5
2	Connecticut	30.7
3	Minnesota	31.3
4	Wisconsin	32.0
5	Illinois	32.4
6	New York	32.8
7	Nebraska	33.0
8	Massachusetts	33.1
9	Iowa	33.1
10	Kansas	33.3
11	Washington	33.8
12	Utah	33.9
13	Idaho	34.0
14	New Jersey	34.0
15	California	34.5
16	Indiana	34.5
17	Arkansas	34.7
18	South Dakota	34.9
19	Rhode Island	35.3
20	North Dakota	35.4
21	Montana	36.1
22	Missouri	37.6
23	New Hampshire	37.7
24	Michigan	37.9
25	Ohio	38.5
26	Pennsylvania	40.0
27	Vermont	40.6
28	Oklahoma	41.2
29	Wyoming	41.2
30	Maryland	41.5
31	Mississippi	44.1
32	Georgia	44.5
33	District of Columbia	44.8
34	*North Carolina*	*4.54*
35	Florida	45.5
36	Tennessee	45.5
37	Alabama	45.5
38	Louisiana	46.3
39	Kentucky	46.7
40	Maine	46.7
41	Virginia	47.1
42	Delaware	48.7
43	Colorado	49.4
44	Nevada	50.2
45	Texas	50.4
46	West Virginia	52.0
47	South Carolina	54.9
48	Arizona	68.8
49	New Mexico	89.1

INFANT DEATHS PER 1,000 LIVE BIRTHS

Rank	State	Maternal Deaths
	United States	*2.3*
1	Wyoming	0.9
2	Utah	1.4
3	Minnesota	1.4
4	Montana	1.5
5	Delaware	1.5
6	Connecticut	1.5
7	Washington	1.6
8	New Jersey	1.6
9	Michigan	1.7
10	California	1.7
11	Nebraska	1.7
12	Wisconsin	1.8
13	North Dakota	1.8
14	Oregon	1.8
15	Iowa	1.8
16	Illinois	1.8
17	Massachusetts	1.8
18	South Dakota	1.8
19	Rhode Island	1.8
20	Kansas	1.8
21	New York	1.9
22	Maryland	1.9
23	Vermont	1.9
24	Ohio	1.9
25	Indiana	2.0
26	District of Columbia	2.1
27	West Virginia	2.2
28	Missouri	2.2
29	Maine	2.3
30	Nevada	2.3
31	Oklahoma	2.4
32	Idaho	2.5
33	Colorado	2.5
34	Kentucky	2.5
35	Texas	2.5
36	Pennsylvania	2.5
37	Virginia	2.6
38	Arkansas	2.8
39	Tennessee	2.8
40	New Hampshire	2.8
41	*North Carolina*	*2.9*
42	Arizona	3.0
43	Florida	3.3
44	Louisiana	3.4
45	Georgia	3.6
46	Alabama	3.7
47	South Carolina	3.7
48	Mississippi	3.8
49	New Mexico	4.0

Source: *Vital Statistics of the United States, 1944.* Part II. Tables 2, 22 and J.

Infant and Maternal Mortality

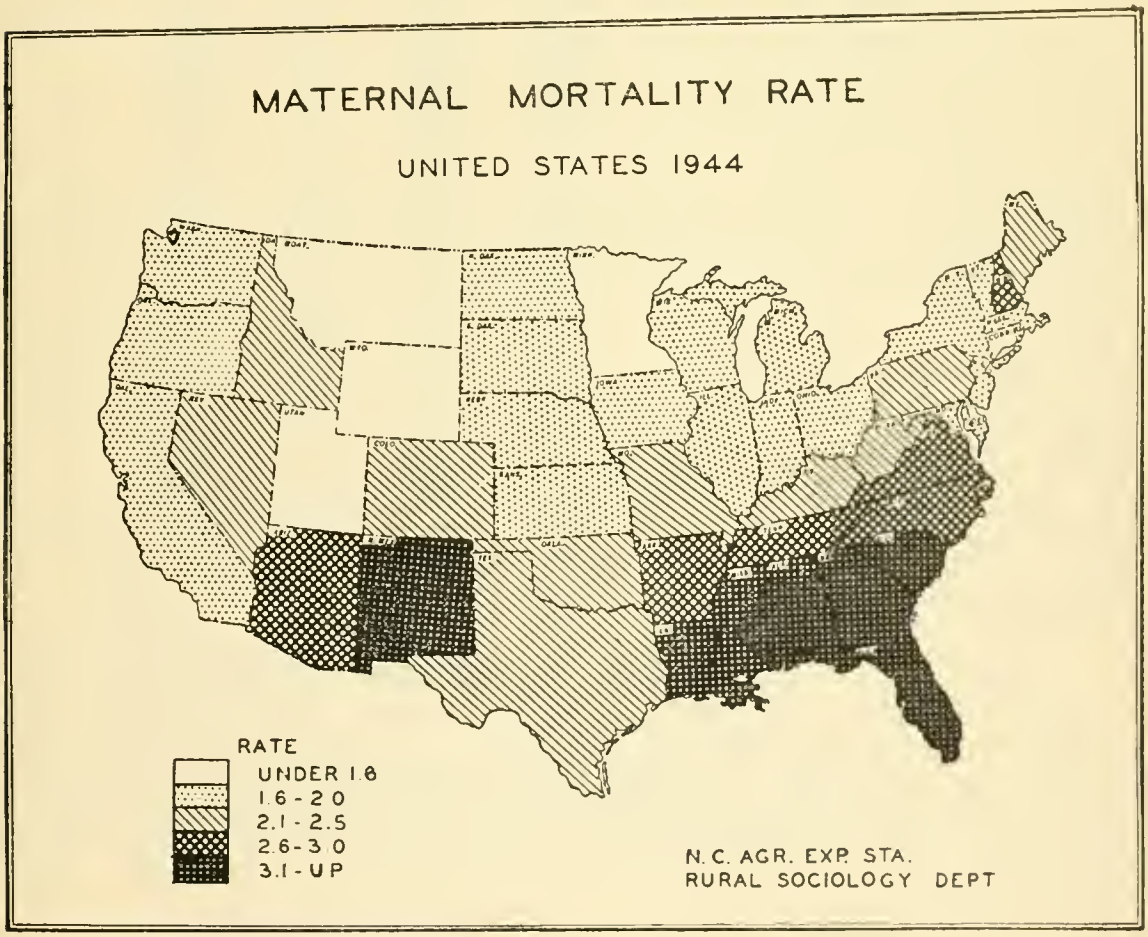
In 1944, there were 266 deaths of mothers at childbirth and 4,115 deaths of infants under one year of age. In addition there were 2,401 stillbirths.

Our *infant mortality rate* is 50 per cent higher than that of the lowest ranking state—Oregon. Only 15 states have higher infant mortality rates than North Carolina. It is possible to reduce infant mortality to less than 15 per 1,000—but not without modern clinics and hospitals.

Our *maternal mortality rate* is three times as high as that of Wyoming, the lowest ranking state. It is possible to wipe out maternal mortality almost entirely.

The death rate among *Negro infants* (60 per 1,000 live births), is 55 per cent higher than among white infants.

The maternal death rate among Negroes in North Carolina is more than double that among the white population. Of the 266 maternal deaths, 130 were Negroes and 136 were white.



Deaths Per 100,000 Population by Principal Cause, North Carolina, 1940.

PRINCIPAL CAUSE OF DEATH	RATE		Ratio of Nonwhite to White Rate	RATE	Ratio of Rural to Urban Rate
	Total	Nonwhite		Rural	
TOTAL DEATHS	893.26	1,160.07	147	844.06	82
Typhoid, paratyphoid fever	1.06	1.49	166	.89	58
Cerebrospinal meningitis	.62	1.00	213	.69	168
Scarlet fever	.28	.30	111	.19	37
Whooping cough	2.52	5.08	334	2.73	140
Diphtheria	3.00	2.89	95	3.27	145
Tuberculosis, pulmonary	41.77	93.83	438	35.80	62
Tuberculosis, other forms	3.25	8.17	619	2.69	57
Malaria	1.68	2.69	209	2.00	244
Syphilis	12.38	32.67	736	10.09	55
Poliomyelitis, polioencephalitis	.45	.60	154	.42	82
Cancer and other malignant tumors	58.57	52.49	86	51.74	67
Acute rheumatic fever	1.88	3.09	221	2.08	156
Diabetes mellitus	14.08	12.75	87	12.09	62
Exophthalmic goiter	1.18	1.20	103	1.00	61
Pellagra (except alcoholic)	4.68	4.18	86	5.24	165
Intercranial lesions of vascular	88.59	111.36	140	83.50	82
Diseases of ear, nose, throat	6.83	8.37	134	6.93	105
Chronic rheumatic heart diseases	14.70	18.33	138	15.09	111
Diseases of coronary arteries, angina	37.66	20.32	46	29.95	51
Diseases of heart, other forms	113.90	126.30	116	107.07	81
Influenza, pneumonia—all forms	75.15	108.67	175	74.88	99
Ulcer of stomach or duodenum	3.56	3.39	94	3.04	62
Diarrhea, enteritis	13.72	23.31	234	15.09	150
Appendicitis	6.27	6.18	98	5.43	64
Hernia, intestinal obstruction	5.77	7.97	162	5.20	71
Cirrhosis of the liver	4.31	3.49	75	3.20	44
Diseases of the gall bladder	2.69	1.00	30	2.04	46
Nephritis	96.12	127.79	153	91.13	83
Puerperal septicemia	3.70	6.57	256	3.73	104
Other puerperal causes	7.84	12.95	222	7.82	99
Congenital malformation	9.58	7.77	76	9.82	110
Premature birth	37.21	48.11	146	36.38	92
Suicide	8.15	2.59	25	6.93	61
Homicide	10.86	28.39	708	7.82	41
Motor vehicle accidents	28.36	27.09	94	26.03	75
Other accidents	36.93	43.83	128	36.15	93
Deaths from all other causes	134.00	193.93	175	135.90	105

Source: *United States Vital Statistics, 1940.*

15,000 Preventable Deaths

In 1940, there were 31,904 deaths in North Carolina and 42 per cent of these were under 45 years of age. Most of these premature deaths were no doubt preventable. If the mortality rates in North Carolina had been as low as found in the most healthy age groups of any state, we would have had only 15,295 deaths in 1940. Instead of 13,306 deaths under 45 years of age we would have had only 5,263 such deaths.

Maternal Deaths Per 1,000 Live Births by Color, United States and North Carolina,[1] 1922-1942.

YEAR	TOTAL		WHITE		NONWHITE	
	U. S.	N. C.	U. S.	N. C.	U. S.	N. C.
1944	2.3	2.9	1.9	2.2	5.1	4.6
1943	2.5	3.2	2.1	2.0	5.1	6.1
1942	2.6	3.4	2.2	2.8	5.4	4.8
1941	3.2	4.0	2.7	3.1	6.8	5.7
1940	3.8	5.1	3.2	4.0	7.7	7.6
1939	4.0	4.7	3.5	3.7	7.6	6.8
1938	4.4	5.3	3.8	4.0	8.5	8.0
1937	4.9	5.4	4.4	4.2	8.6	7.9
1936	5.7	6.6	5.1	5.6	9.7	8.8
1935	5.8	6.5	5.3	5.3	9.5	8.9
1934	5.9	7.1	5.4	6.2	9.0	9.1
1933	6.1	6.8	5.6	5.8	9.7	9.0
1932	6.2	6.8	5.8	5.4	9.8	9.8
1931	6.6	8.0	6.0	6.4	11.1	11.6
1930	6.7	8.3	6.1	6.7	11.7	12.1
1929	7.0	8.4	6.3	7.2	12.0	11.2
1928	6.9	7.8	6.3	6.7	12.1	10.5
1927	6.5	6.6	5.9	5.1	11.3	9.9
1926	6.6	8.8	6.2	7.1	10.7	12.6
1925	6.5	8.7	6.0	6.8	11.6	12.8
1924	6.6	7.7	6.1	6.6	11.8	10.4
1923	6.7	8.0	6.3	6.7	10.9	10.7
1922	6.6	8.0	6.3	7.0	10.7	9.9

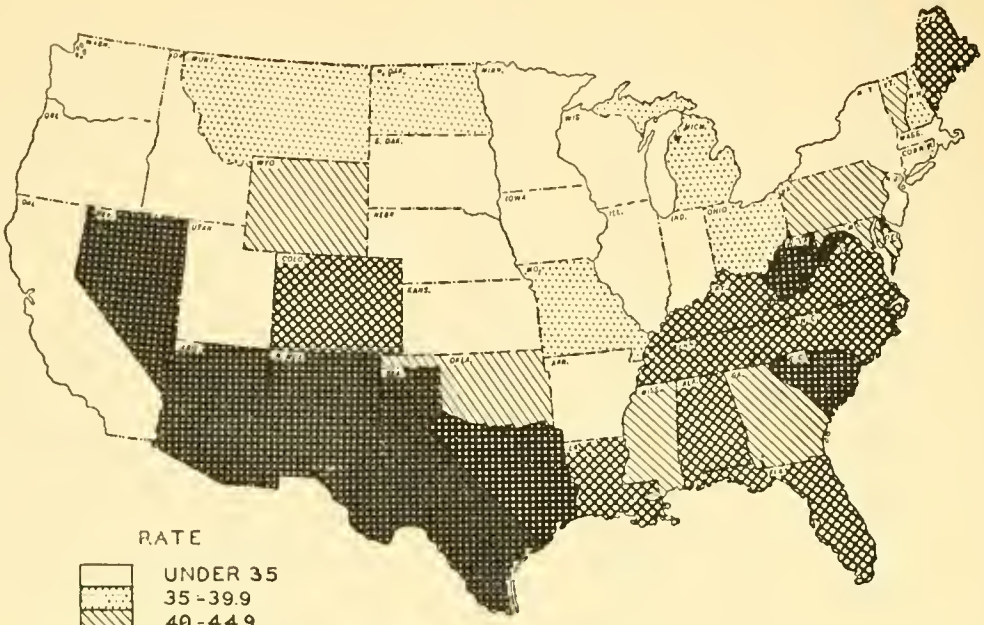
Maternal Mortality Rates[2] By Color and Population-Size Groups,[3] United States and North Carolina, 1940.

POPULATION-SIZE GROUPS	TOTAL		WHITE		NONWHITE	
	U. S.	N. C.	U. S.	N. C.	U. S.	N. C.
TOTAL	3.8	5.1	3.2	4.0	7.7	7.6
Cities of 10,000 and over population:						
Total	3.4	5.2	3.0	4.3	7.3	7.1
100,000 and over	3.1	4.8	2.8	3.4	6.2	8.0
25,000-99,999	3.7	5.4	3.1	3.8	9.3	8.2
10,000-24,999	4.0	5.2	3.5	5.4	10.1	4.7
Cities under 10,000 and rural:						
Total	4.0	5.1	3.4	3.9	8.0	7.7
2,500-9,999	4.3	7.1	3.8	3.6	10.2	18.5
Rural	4.0	4.9	3.3	3.9	7.7	7.0

Source: *United States Vital Statistics.*
[1]Place of occurrence.
[2]Rates are the number of deaths of mothers in a specified group per 1,000 live births in that group.
[3]Place of residence.

INFANT MORTALITY RATE

UNITED STATES 1944



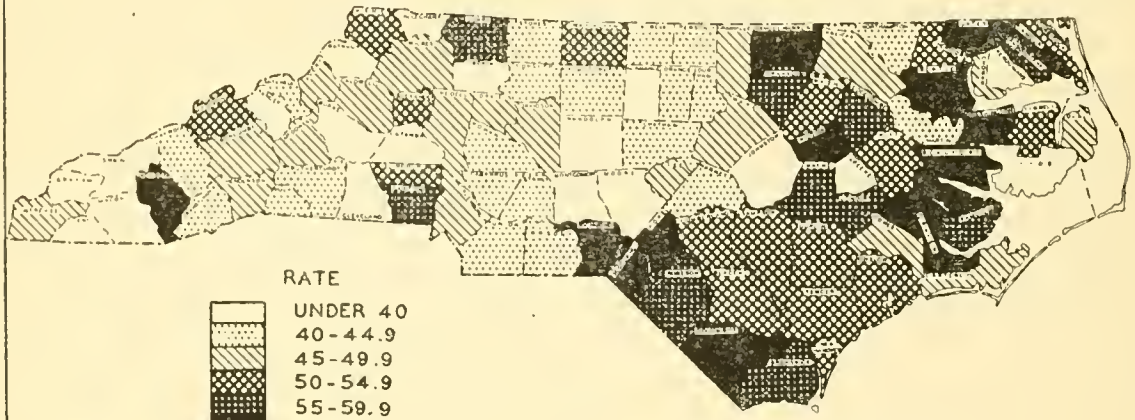
RATE

- UNDER 35
- 35-39.9
- 40-44.9
- 45-49.9
- 50-UP

N.C. AGR. EXP. STA.
RURAL SOCIOLOGY DEPT.

INFANT MORTALITY RATE

NORTH CAROLINA 1941-45
AVERAGE



RATE

- UNDER 40
- 40-44.9
- 45-49.9
- 50-54.9
- 55-59.9
- 60-UP

N.C. AGR. EXP. STA.
RURAL SOCIOLOGY DEPT.

Crude* Death Rates and Infant Mortality Rates, North Carolina Counties, Average 1941-1945

STATE AND COUNTIES	Deaths Per 1,000 Population	Infant Deaths Per 1,000 Live Births	STATE AND COUNTIES	Deaths Per 1,000 Population	Infant Deaths Per 1,000 Live Births
North Carolina	*8.9*	*48.5*			
Alamance	7.0	32.5	Johnston	7.8	38.4
Alexander	9.4	51.9	Jones	8.3	46.8
Alleghany	7.6	16.6	Lee	9.1	48.2
Anson	8.8	44.5	Lenoir	10.9	55.2
Ashe	8.0	52.3	Lincoln	8.1	50.1
Avery	7.8	46.9	McDowell	8.5	46.0
Beaufort	12.5	70.5	Macon	7.9	34.0
Bertie	10.4	62.0	Madison	8.6	51.5
Bladen	9.3	53.4	Martin	9.2	43.3
Brunswick	10.0	59.0	Mecklenburg	9.1	46.3
Buncombe	10.3	47.6	Mitchell	6.8	40.0
Burke	10.4	28.4	Montgomery	8.2	35.3
Cabarrus	6.2	41.3	Moore	7.9	36.5
Caldwell	8.1	49.6	Nash	9.5	52.7
Camden	10.8	69.3	New Hanover	8.7	54.0
Carteret	10.3	45.0	Northampton	7.1	40.4
Caswell	8.0	42.9	Onslow	7.8	54.1
Catawba	7.7	37.3	Orange	8.4	44.3
Chatham	8.8	41.1	Pamlico	10.2	57.1
Cherokee	7.8	48.8	Pasquotank	10.3	57.3
Chowan	10.6	48.0	Pender	11.2	51.8
Clay	8.1	37.7	Perquimans	9.6	34.4
Cleveland	6.5	36.2	Person	7.8	41.1
Columbus	9.4	60.3	Pitt	8.9	50.6
Craven	11.2	64.6	Polk	8.6	41.8
Cumberland	9.9	52.8	Randolph	8.3	33.5
Currituck	11.7	51.8	Richmond	10.5	62.2
Dare	12.5	47.3	Robeson	9.8	59.1
Davidson	7.8	48.1	Rockingham	8.0	52.5
Davie	9.4	48.6	Rowan	9.5	44.8
Duplin	9.2	52.1	Rutherford	7.9	40.3
Durham	9.1	44.0	Sampson	8.5	50.3
Edgecombe	10.0	58.7	Scotland	10.3	71.8
Forsyth	9.7	44.7	Stanly	7.8	44.8
Franklin	9.1	56.8	Stokes	7.3	41.5
Gaston	6.9	56.3	Surry	8.2	56.3
Gates	10.7	64.7	Swain	4.7	31.2
Graham	3.0	38.9	Transylvania	7.9	42.9
Granville	9.4	45.2	Tyrrell	10.5	52.9
Greene	6.7	35.1	Union	8.6	43.5
Guilford	8.2	41.5	Vance	10.3	63.9
Halifax	9.0	49.6	Wake	10.3	45.3
Harnett	7.7	43.0	Warren	11.0	73.1
Haywood	7.7	41.4	Washington	10.8	63.8
Henderson	9.4	46.1	Watauga	6.9	32.7
Hertford	9.7	54.7	Wayne	12.0	59.8
Hoke	10.6	63.1	Wilkes	9.1	49.5
Hyde	10.6	35.3	Wilson	10.6	61.5
Iredell	8.8	49.2	Yadkin	7.4	34.1
Jackson	8.9	61.3	Yancey	7.3	37.9

* "Crude" means that the rates have not been adjusted for differences in age distribution as between counties.

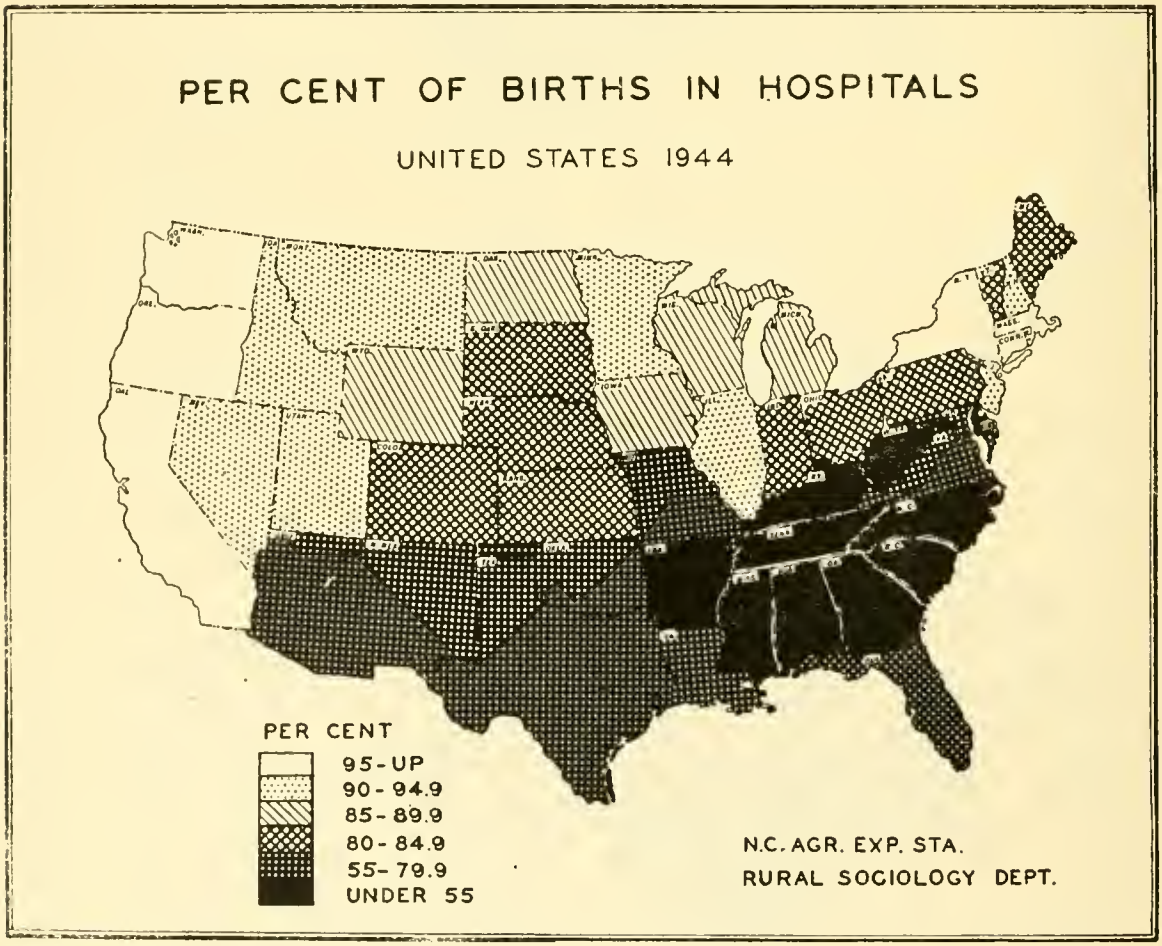
Births and Deaths in Hospitals

The extent to which hospital facilities are used is indicated by the percentage of births and deaths in hospitals.

In 1944, only 51.1 per cent of all North Carolina births occurred in hospitals: 64.1 per cent of the white and 22.2 per cent of the Negro. Also, 4.1 per cent of white infants and 43.2 per cent of Negro infants were delivered by midwives.

89.3 per cent of white *urban* infants were delivered in hospitals as against only 54.1 per cent of *rural* white infants. The corresponding rates for Negro urban and rural infants were 48.5 per cent and 13.3 per cent, respectively. One-half of Negro rural infants were delivered by midwives as compared with one-fourth of Negro urban infants.

Only 8 states had fewer babies born in hospitals than is the case for North Carolina, and in the lowest ranking state, Connecticut, 97.9 per cent of all infants were born in hospitals.



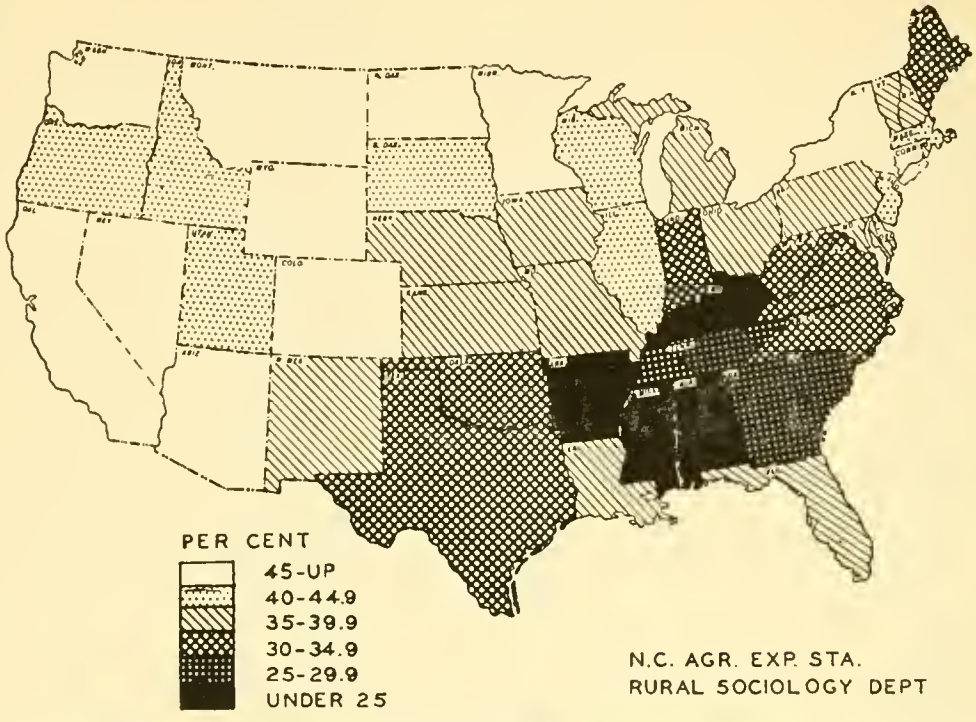
Per Cent of Births and Deaths Occurring in Hospitals, United States, 1944

	BIRTHS IN HOSPITALS		*DEATHS IN HOSPITALS*	
Rank	State	Per Cent	State	Per Cent
	United States	*75.6*	United States	*38.6*
1	Connecticut	97.9	Montana	52.2
2	Washington	97.1	Washington	51.4
3	Oregon	96.8	District of Columbia	51.1
4	Massachusetts	95.3	Nevada	49.6
5	California	95.2	Wyoming	49.2
6	New York	95.0	California	48.8
7	District of Columbia	95.0	Colorado	47.3
8	Nevada	94.6	Connecticut	46.5
9	Montana	93.4	North Dakota	46.3
10	New Hampshire	93.1	Minnesota	45.9
11	New Jersey	92.5	New York	45.9
12	Idaho	92.3	Arizona	45.9
13	Rhode Island	91.9	Oregon	44.8
14	Utah	90.3	Wisconsin	44.2
15	Illinois	90.0	Illinois	44.1
16	Minnesota	90.0	Idaho	43.6
17	Wyoming	89.7	New Jersey	42.6
18	Michigan	88.2	Delaware	40.8
19	Wisconsin	87.9	Utah	40.7
20	North Dakota	86.2	Massachusetts	40.4
21	Iowa	85.3	South Dakota	40.1
22	Nebraska	84.4	Nebraska	38.7
23	Ohio	84.0	Kansas	38.7
24	Kansas	83.9	Pennsylvania	38.6
25	Delaware	83.6	Michigan	38.5
26	South Dakota	82.3	Rhode Island	38.3
27	Colorado	82.1	Iowa	37.8
28	Pennsylvania	81.5	Maryland	37.6
29	Vermont	81.4	Vermont	37.0
30	Maine	81.2	New Hampshire	36.9
31	Indiana	80.9	Missouri	36.8
32	Arizona	79.6	New Mexico	36.5
33	Maryland	73.8	Florida	36.3
34	Missouri	68.5	Ohio	36.0
35	Oklahoma	68.1	Louisiana	35.6
36	Florida	66.8	Maine	33.7
37	Texas	65.9	Oklahoma	32.7
38	Louisiana	61.7	Indiana	32.0
39	New Mexico	55.9	Texas	31.6
40	Virginia	55.7	Virginia	30.8
41	*North Carolina*	*51.1*	West Virginia	30.7
42	Georgia	50.7	*North Carolina*	*30.6*
43	Tennessee	47.1	Tennessee	27.4
44	West Virginia	42.7	Georgia	27.1
45	Arkansas	41.9	South Carolina	26.7
46	South Carolina	41.2	Kentucky	24.8
47	Alabama	39.3	Arkansas	24.8
48	Kentucky	38.6	Alabama	24.2
49	Mississippi	31.2	Mississippi	21.3

Source: *Vital Statistics of the United States, 1944.* Part II. Tables R and 25.

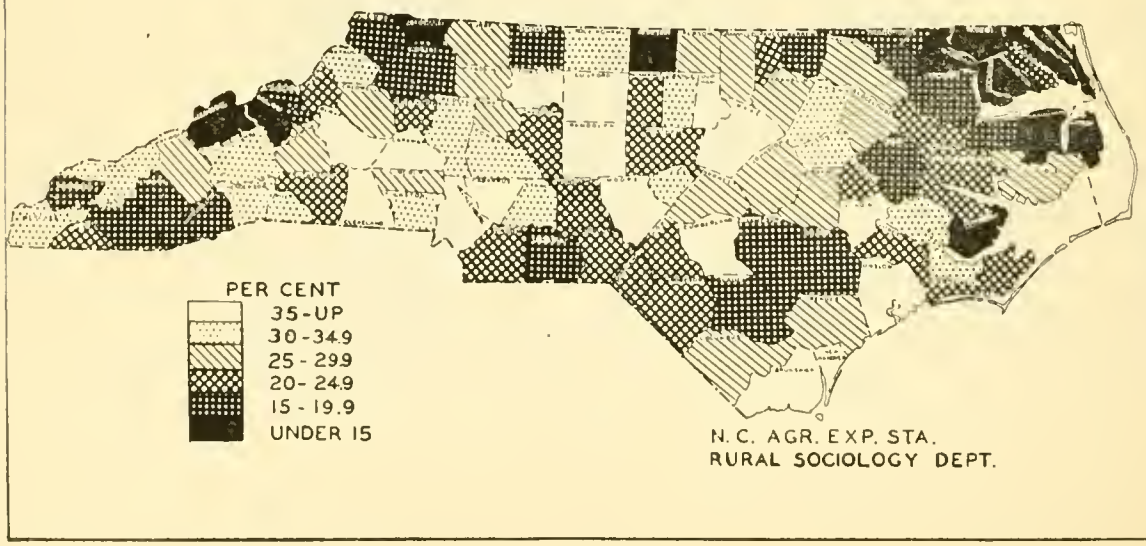
PER CENT OF DEATHS IN HOSPITALS

UNITED STATES 1944



DEATHS IN HOSPITALS

NORTH CAROLINA 1945



Per Cent of Births and Deaths in Hospitals and Per Cent of Births Attended by Midwives, North Carolina, 1945.

STATE AND COUNTIES	Per Cent Births in Hospitals	Per Cent Deaths in Hospitals	Per Cent Births Attended By Midwives
North Carolina	53.5	30.1	17.3
Alamance	63.6	22.7	2.7
Alexander	35.6	23.4	2.8
Alleghany	24.5	12.2	2.7
Anson	25.5	15.7	50.7
Ashe	41.1	15.9	20.9
Avery	78.0	22.8	16.3
Beaufort	59.2	23.9	28.0
Bertie	33.3	15.1	46.1
Bladen	16.9	16.7	34.3
Brunswick	50.4	37.8	46.4
Buncombe	73.0	34.2	7.6
Burke	80.7	44.0	14.3
Cabarrus	81.8	40.1	6.3
Caldwell	59.4	26.8	4.1
Camden	18.4	12.1	56.1
Carteret	70.6	24.2	13.2
Caswell	8.6	14.2	37.1
Catawba	84.6	35.2	10.5
Chatham	40.8	24.4	16.5
Cherokee	42.9	31.5	47.8
Chowan	9.5	9.3	30.2
Clay	51.6	21.9	21.4
Cleveland	56.2	39.7	18.2
Columbus	46.3	27.0	38.8
Craven	61.7	31.0	29.3
Cumberland	43.8	37.2	31.1
Currituck	16.9	5.5	48.4
Dare	22.8	10.2	18.5
Davidson	73.9	24.6	2.2
Davie	44.6	29.2	2.3
Duplin	18.7	16.9	12.6
Durham	88.9	41.6	5.3
Edgecombe	37.5	29.7	25.8
Forsyth	84.6	39.9	0.9
Franklin	32.7	29.5	27.0
Gaston	61.9	30.5	5.3
Gates	30.9	0.0	42.0
Graham	24.9	17.9	33.0
Granville	36.2	25.1	10.3
Greene	19.6	20.8	13.8
Guilford	80.8	39.4	2.5
Halifax	31.1	29.3	52.8
Harnett	49.6	27.8	11.9
Haywood	80.6	28.8	3.5
Henderson	78.8	34.9	5.2
Hertford	14.9	7.0	20.7
Hoke	12.8	23.2	47.6
Hyde	30.1	25.6	61.9
Iredell	64.1	31.3	9.2
Jackson	31.6	19.3	20.7
Johnston	36.8	25.3	14.0
Jones	30.9	20.5	32.5
Lee	62.2	32.5	14.2
Lenoir	53.5	37.0	23.8
Lincoln	66.9	29.5	10.3
McDowell	63.1	26.6	4.3
Macon	23.8	16.7	14.2
Madison	17.4	14.0	39.0
Martin	17.0	20.1	28.7
Mecklenburg	89.8	41.3	3.9
Mitchell	32.4	17.6	25.2
Montgomery	51.7	20.5	23.0
Moore	60.2	37.0	16.1
Nash	39.3	34.6	20.1
New Hanover	92.2	55.4	6.4
Northampton	17.6	16.7	51.7
Onslow	52.8	39.2	17.9
Orange	62.3	30.3	11.2
Pamlico	9.5	14.1	22.0
Pasquotank	40.2	16.3	29.8
Pender	26.7	27.9	48.7
Perquimans	8.2	9.5	43.6
Person	38.5	29.0	9.2
Pitt	27.2	17.3	22.1
Polk	47.8	31.0	5.1
Randolph	74.2	35.7	5.5
Richmond	31.3	22.8	24.8
Robeson	34.5	24.5	27.5
Rockingham	55.6	31.6	4.7
Rowan	71.3	34.9	7.5
Rutherford	23.2	21.7	7.0
Sampson	23.2	18.9	25.6
Scotland	22.0	20.3	54.4
Stanly	77.3	33.7	2.5
Stokes	24.5	16.6	8.0
Surry	44.7	25.4	5.9
Swain	26.2	30.8	25.2
Transylvania	47.8	18.9	9.7
Tyrrell	66.7	5.7	20.4
Union	44.6	23.2	12.3
Vance	57.9	24.9	31.5
Wake	63.3	43.0	11.1
Warren	15.8	19.5	66.8
Washington	21.6	15.1	47.3
Watauga	74.8	33.6	11.8
Wayne	34.2	27.2	10.0
Wilkes	44.6	18.9	18.7
Wilson	44.5	32.2	19.0
Yadkin	68.4	25.0	3.4
Yancey	29.3	10.8	45.7

Source: North Carolina State Board of Health.

Income Per Capita, Average 1943-45.

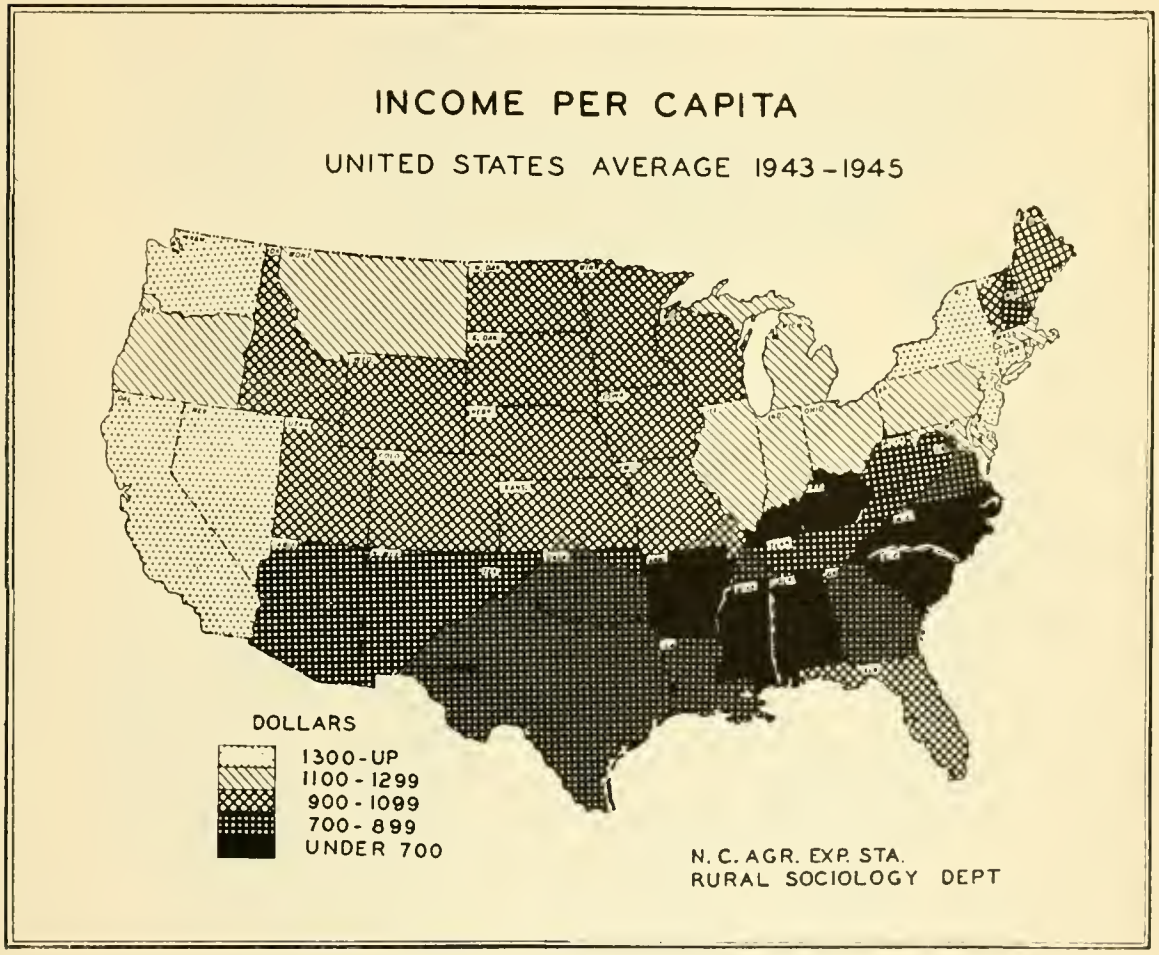
Rank	United States State	Income in Dollars
....	United States	$1,108
1	New York	1,489
2	Connecticut	1,480
3	California	1,473
4	Washington	1,441
5	Delaware	1,371
6	New Jersey	1,360
7	District of Columbia	1,313
8	Nevada	1,302
9	Illinois	1,299
10	Oregon	1,276
11	Massachusetts	1,271
12	Ohio	1,266
13	Michigan	1,260
14	Rhode Island	1,258
15	Maryland	1,222
16	Pennsylvania	1,149
17	Indiana	1,136
18	Montana	1,133
19	Wisconsin	1,091
20	Kansas	1,080
21	Maine	1,055
22	Nebraska	1,051
23	North Dakota	1,051
24	Iowa	1,044
25	Utah	1,028
26	Wyoming	1,027
27	Colorado	1,025
28	Idaho	1,008
29	Missouri	991
30	Minnesota	981
31	South Dakota	966
32	Vermont	958
33	Florida	942
34	Texas	894
35	Arizona	891
36	New Hampshire	891
37	Virginia	875
38	Oklahoma	826
39	West Virginia	776
40	Louisiana	765
41	New Mexico	755
42	Tennessee	747
43	Georgia	710
44	Kentucky	683
45	NORTH CAROLINA	681
46	Alabama	660
47	South Carolina	630
48	Arkansas	597
49	Mississippi	527

Source: Schwartz, Charles F., and Graham, Robert E., Jr., "State Income Payments in 1945." *Survey of Current Business.* Vol. 26, No. 8, August, 1946, page 16, table 4.

Economic and Social Factors

North Carolina has inadequate medical and hospital services because its people earn relatively low incomes and have a relatively large number of children and elders to support.

Net income per capita in 1940 was $317 as compared with $573 for the nation as a whole. Only four states had lower incomes in 1940. The average net income per capita, 1943-1945 inclusive, was $681 and still only four states (Alabama, Mississippi, South Carolina, and Arkansas) had lower incomes.



Rejections for Military Service

In 1943, February through August, North Carolina led the nation in percentage of registrants rejected for military service. From August, 1944, through August, 1945, only three states had higher rejection rates than North Carolina.

Preinduction rejection rates for the two periods, for which published data are available, are:*

	1943	*1944-45*
All registrants	56.8	48.6
White registrants	49.2	44.6
Negro registrants	71.5	57.1

Percentage of Registrants Rejected for Military Service

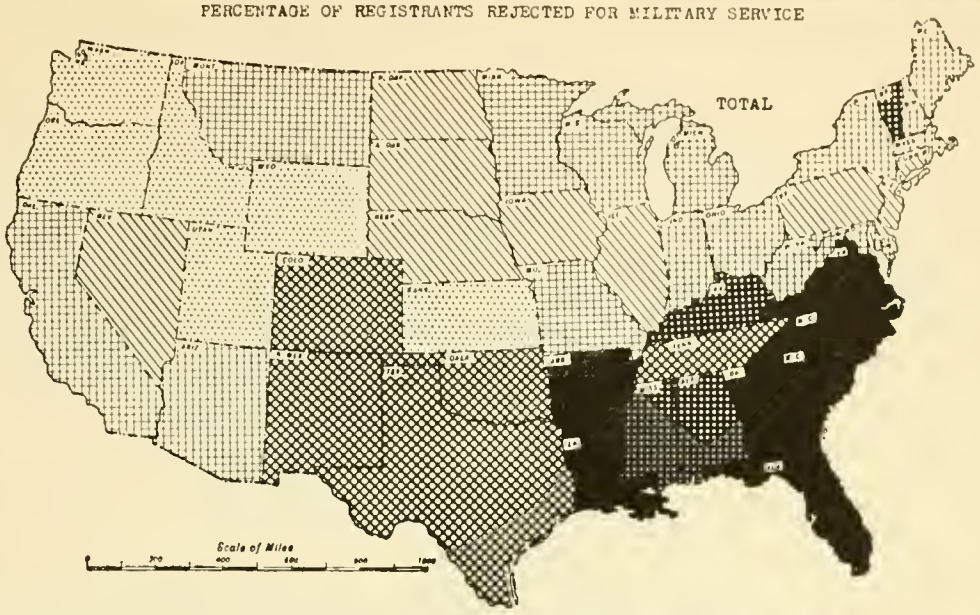
(At local boards and induction stations, February, 1943, through August, 1943)

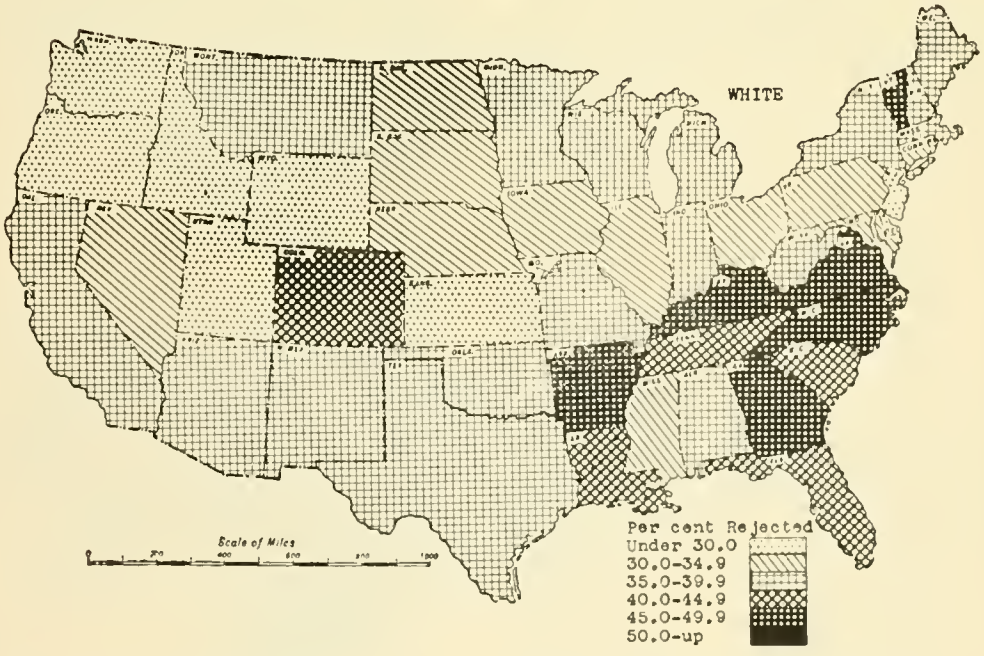
ALL REGISTRANTS			Preliminary WHITE REGISTRANTS			NEGRO REGISTRANTS		
Rank	State	Per Cent	Rank	State	Per Cent	Rank	State	Per Cent
32	United States	39.2	23	United States	36.0	38	United States	56.9
1	Oregon	24.1	1	Oregon	24.4	*	Arizona	*
2	Kansas	25.4	2	Kansas	24.8	*	Colorado	*
3	Utah	26.1	3	Utah	26.0	*	Idaho	*
4	Washington	28.2	4	Washington	28.0	*	Iowa	*
5	Wyoming	29.1	5	Delaware	28.2	*	Maine	*
6	Idaho	29.3	6	Idaho	29.0	*	Minnesota	*
7	Connecticut	31.0	7	New Jersey	29.1	*	Montana	*
8	South Dakota	31.1	8	Wyoming	29.2	*	Nebraska	*
9	Nebraska	31.6	9	Connecticut	30.4	*	Nevada	*
10	Pennsylvania	31.8	10	Pennsylvania	30.9	*	New Hampshire	*
11	Delaware	31.9	11	South Dakota	31.1	*	New Mexico	*
12	Illinois	32.9	12	Nebraska	31.3	*	North Dakota	*
12	Nevada	32.9	13	Illinois	31.6	*	Oregon	*
14	New Jersey	33.0	14	Maryland	32.4	*	Rhode Island	*
15	Iowa	33.1	15	Nevada	32.6	*	South Dakota	*
16	North Dakota	33.8	16	Mississippi	32.9	*	Utah	*
17	California	35.6	17	Iowa	33.0	*	Vermont	*
18	Minnesota	35.7	18	North Dakota	33.7	*	Washington	*
19	Ohio	35.8	19	Ohio	34.8	*	Wisconsin	*
20	Indiana	36.2	20	California	35.2	*	Wyoming	*
21	Montana	36.5	20	Indiana	35.2	21	Kansas	33.4
22	Missouri	37.2	22	Missouri	35.4	22	West Virginia	41.0
23	Rhode Island	37.3	23	Minnesota	35.6	23	Illinois	41.8
24	Michigan	37.4	24	Michigan	36.3	24	Pennsylvania	43.1
24	Maryland	37.4	25	Montana	36.5	25	New Jersey	44.5
26	Maine	37.5	26	New York	36.8	26	Delaware	44.7
27	Massachusetts	37.7	27	Rhode Island	37.2	27	Connecticut	45.1
27	New York	37.7	28	Maine	37.4	28	California	46.4
27	West Virginia	37.7	28	Massachusetts	37.4	29	Ohio	46.9
30	New Hampshire	38.9	28	West Virginia	37.4	30	New York	48.0
30	Wisconsin	38.9	31	Oklahoma	38.2	31	Indiana	48.3
32	Arizona	39.0	32	Arizona	38.4	32	Kentucky	49.7
33	New Mexico	40.1	33	Wisconsin	38.7	33	Missouri	50.4
34	Oklahoma	40.6	34	New Hampshire	38.9	34	Michigan	51.2
35	Texas	42.9	35	Texas	39.4	35	Massachusetts	52.4
36	Colorado	43.1	36	Alabama	39.5	36	Maryland	53.1
37	Tennessee	44.7	37	New Mexico	39.9	37	Mississippi	54.2
38	Mississippi	45.0	38	Tennessee	40.1	38	Oklahoma	55.9
39	Kentucky	45.4	39	Florida	41.4	39	Tennessee	57.4
40	Vermont	45.7	40	Louisiana	42 5	40	Georgia	57.8
41	Alabama	49.0	42	South Carolina	42.9	40	Texas	57.8
42	Georgia	51.5	42	Colorado	43.0	42	Alabama	61.0
43	Virginia	52.2	43	Kentucky	45.1	43	Virginia	63.9
44	Louisiana	52.6	44	Virginia	45.5	44	Louisiana	64.0
45	Florida	53.2	45	Vermont	45.7	45	Florida	65.8
46	Arkansas	55.9	46	Arkansas	46.9	46	South Carolina	69.4
46	South Carolina	55.9	46	Georgia	46.9	47	Arkansas	70.9
48	*North Carolina*	*56.8*	*48*	*North Carolina*	*49.2*	*48*	*North Carolina*	*71.5*

* States having less than 0.3 per cent of total Negro registrants are omitted.

Source: U. S. Senate Hearings Subcommittee on Wartime Health and Education.

PERCENTAGE OF REGISTRANTS REJECTED FOR MILITARY SERVICE

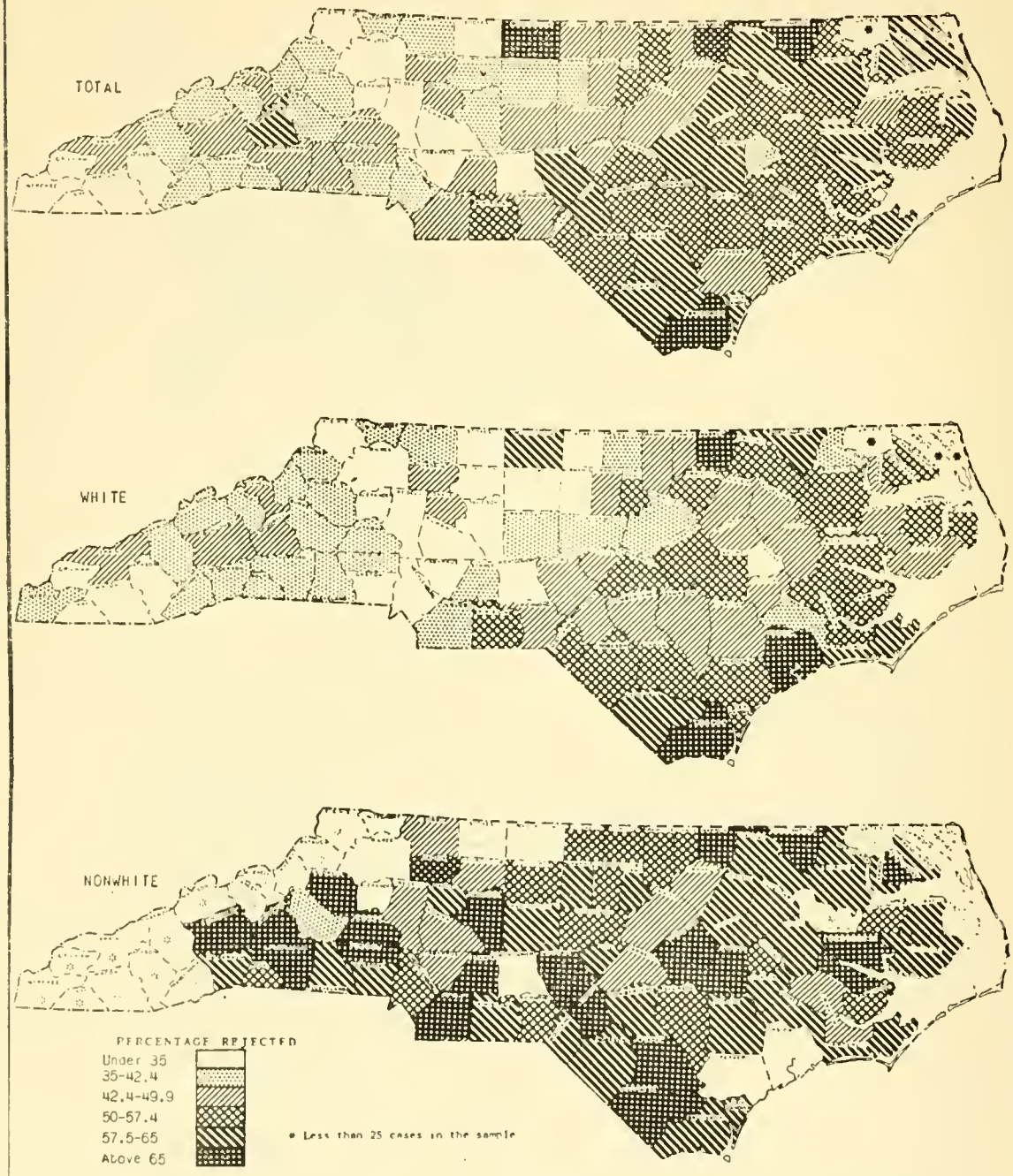




N.C. Agricultural Experiment Station
DEPARTMENT OF RURAL SOCIOLOGY

Based on data from U.S. Senate Hearings
Subcommittee on Wartime Health and Education

PERCENTAGE SELECTIVE SERVICE REGISTRANTS REJECTED FOR MILITARY SERVICE
THROUGH MARCH 31, 1943, NORTH CAROLINA



N.C. Agricultural Experiment Station
DEPARTMENT OF RURAL SOCIOLOGY

BASED ON DATA FROM NORTH CAROLINA SELECTIVE SERVICE HEADQUARTERS

Percentage Selective Service Registrants Rejected for Military Service by Color of Registrant, Through March 31, 1943, North Carolina.

COUNTY	RANK	PERCENTAGE REJECTED		
		TOTAL	WHITE	NON-WHITE
NORTH CAROLINA	48	48.1	40.9	60.6
Alamance	27	40.4	32.5	57.5
Alexander	3	17.8	15.8	*
Alleghany	32	41.9	40.3	*
Anson	71	55.3	51.7	58.4
Ashe	5	25.3	25.6	*
Avery	23	39.1	39.7	*
Beaufort	91	61.3	53.8	68.8
Bertie	87	59.2	51.8	63.2
Bladen	89	60.4	51.9	67.6
Brunswick	97	65.5	67.6	63.7
Buncombe	50	48.7	43.7	68.8
Burke	19	36.8	36.2	41.9
Cabarrus	11	33.7	30.1	47.3
Caldwell	29	41.6	38.0	70.0
Camden	90	61.0	*	*
Carteret	82	58.2	52.8	59.3
Caswell	35	42.7	33.1	53.0
Catawba	41	46.3	40.7	78.9
Chatham	46	47.3	42.4	55.9
Cherokee	14	35.6	35.0	*
Chowan	75	56.0	48.7	62.5
Clay	6	27.4	27.4	*
Cleveland	42	46.4	38.6	64.5
Columbus	96	64.7	59.3	69.7
Craven	57	50.0	51.9	48.6
Cumberland	66	53.4	45.8	61.4
Currituck	93	62.9	*	*
Dare	85	58.8	53.3	*
Davidson	21	37.6	32.6	68.9
Davie	48	48.3	42.9	64.7
Duplin	65	52.5	42.6	60.2
Durham	73	55.9	52.5	60.4
Edgecombe	78	56.7	47.4	62.1
Forsyth	14	35.6	25.0	48.3
Franklin	52	49.0	50.0	48.4
Gaston	24	39.2	34.5	63.7
Gates	*	*	*	*
Graham	2	4.9	4.9	*
Granville	58	50.5	46.4	53.2
Greene	29	41.6	25.7	55.7
Guilford	18	36.2	29.3	57.0
Halifax	81	58.3	52.5	62.4
Harnett	61	51.2	52.7	48.5
Haywood	22	38.7	38.7	*
Henderson	28	40.5	37.9	60.5
Hertford	67	53.6	42.2	58.0
Hoke	92	62.3	48.6	71.6
Hyde	61	51.2	43.5	60.0
Iredell	12	34.4	31.0	48.6
Jackson	10	32.4	32.0	*
Johnston	86	59.0	55.4	66.0
Jones	58	50.5	40.4	62.0
Lee	44	46.8	46.0	60.5
Lenoir	72	55.6	43.7	64.4
Lincoln	37	44.7	41.1	68.9
Macon	9	31.0	30.8	*
Madison	31	41.8	41.2	*
Martin	60	51.0	51.0	*
McDowell	88	60.3	46.7	69.4
Mecklenburg	16	35.8	25.0	56.2
Mitchell	51	48.9	48.9	*
Montgomery	4	22.7	19.3	32.0
Moore	84	58.7	48.4	72.2
Nash	79	57.5	47.6	64.9
New Hanover	80	58.0	51.9	64.7
Northampton	99	65.8	63.7	66.7
Onslow	64	52.4	65.4	31.3
Orange	47	47.8	43.4	53.2
Pamlico	68	54.4	51.6	57.4
Pasquotank	83	58.6	55.6	60.2
Pender	34	42.6	50.0	34.6
Perquimans	94	63.4	53.1	68.9
Person	43	46.5	35.8	55.0
Pitt	73	55.9	44.6	64.7
Polk	32	41.9	38.4	56.7
Randolph	36	44.6	42.0	58.3
Richmond	52	49.0	44.1	56.7
Robeson	77	56.2	50.8	62.9
Rockingham	99	65.8	62.7	*
Rowan	8	29.0	26.6	46.3
Rutherford	39	45.2	41.6	70.1
Sampson	63	51.7	47.8	56.8
Scotland	76	56.1	50.5	63.6
Stanly	45	46.9	35.3	65.3
Stokes	13	34.7	34.1	*
Surry	25	39.8	39.1	48.6
Swain	37	44.7	44.3	*
Transylvania	20	37.0	38.2	*
Tyrrell	70	55.0	50.0	59.5
Union	56	49.6	42.4	70.9
Vance	53	49.1	45.0	52.2
Wake	40	45.7	42.2	49.7
Warren	97	65.5	65.3	65.6
Washington	54	49.1	45.7	51.5
Watauga	26	39.9	39.7	*
Wayne	95	63.8	55.3	68.9
Wilkes	7	28.3	28.7	*
Wilson	69	54.9	45.8	61.0
Yadkin	49	48.6	46.2	68.0
Yancey	17	36.1	36.1	*

* Less than 25 cases in sample.

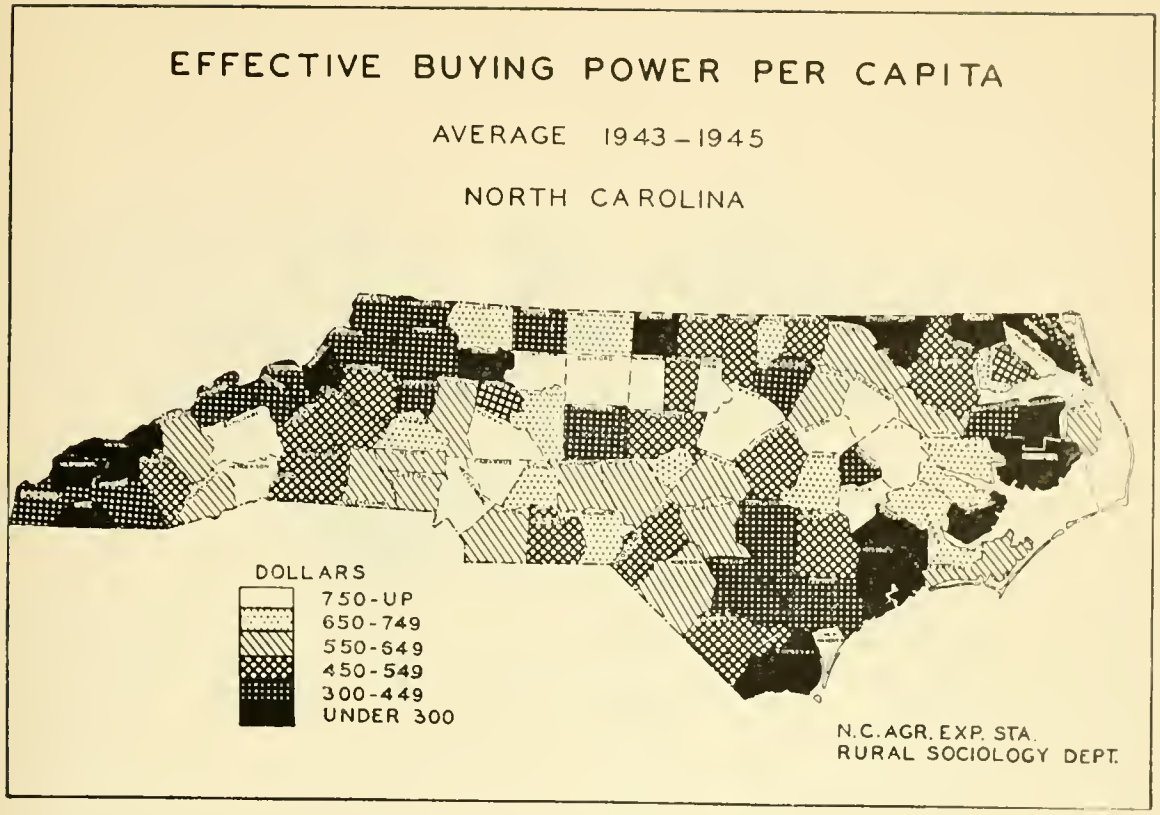
Source: North Carolina Selective Service Headquarters; calculations based upon a systematic sample of records and not upon the entire number examined.

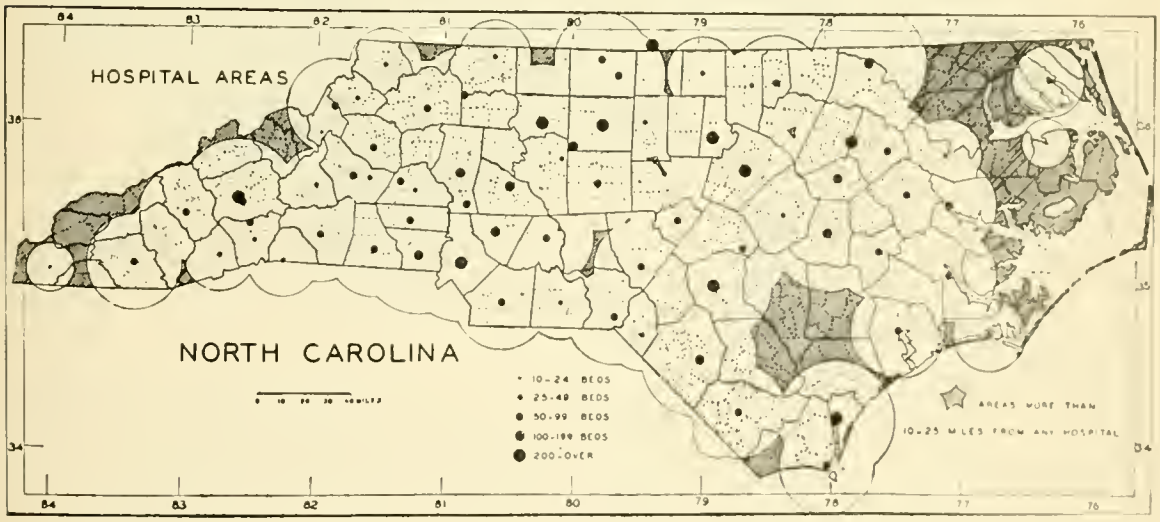
Per Capita Effective Buying Income.*

STATE AND COUNTIES	1943-45
NORTH CAROLINA	$ 724
Alamance	885
Alexander	368
Alleghany	399
Anson	501
Ashe	315
Avery	198
Beaufort	736
Bertie	451
Bladen	401
Brunswick	264
Buncombe	1,227
Burke	514
Cabarrus	750
Caldwell	545
Camden	197
Carteret	568
Caswell	281
Catawba	708
Chatham	510
Cherokee	369
Chowan	655
Clay	182
Cleveland	633
Columbus	461
Craven	694
Cumberland	591
Currituck	333
Dare	604
Davidson	658
Davie	450
Duplin	464
Durham	1,449
Edgecombe	816
Forsyth	1,287
Franklin	403
Gaston	611
Gates	205
Graham	187
Granville	510
Greene	439
Guilford	1,107
Halifax	574
Harnett	580
Haywood	605
Henderson	845
Hertford	500
Hoke	457
Hyde	194
Iredell	603
Jackson	481

STATE AND COUNTIES	1943-45
NORTH CAROLINA	
Johnston	$ 534
Jones	214
Lee	668
Lenoir	853
Lincoln	554
McDowell	480
Macon	430
Madison	362
Martin	640
Mecklenburg	1,482
Mitchell	431
Montgomery	618
Moore	640
Nash	595
New Hanover	973
Northampton	235
Onslow	209
Orange	528
Pamlico	224
Pasquotank	848
Pender	307
Perquimans	495
Person	534
Pitt	774
Polk	503
Randolph	432
Richmond	714
Robeson	595
Rockingham	678
Rowan	911
Rutherford	504
Sampson	444
Scotland	501
Stanly	675
Stokes	366
Surry	696
Swain	262
Transylvania	587
Tyrrell	290
Union	554
Vance	749
Wake	977
Warren	475
Washington	426
Watauga	440
Wayne	657
Wilkes	440
Wilson	798
Yadkin	278
Yancey	313

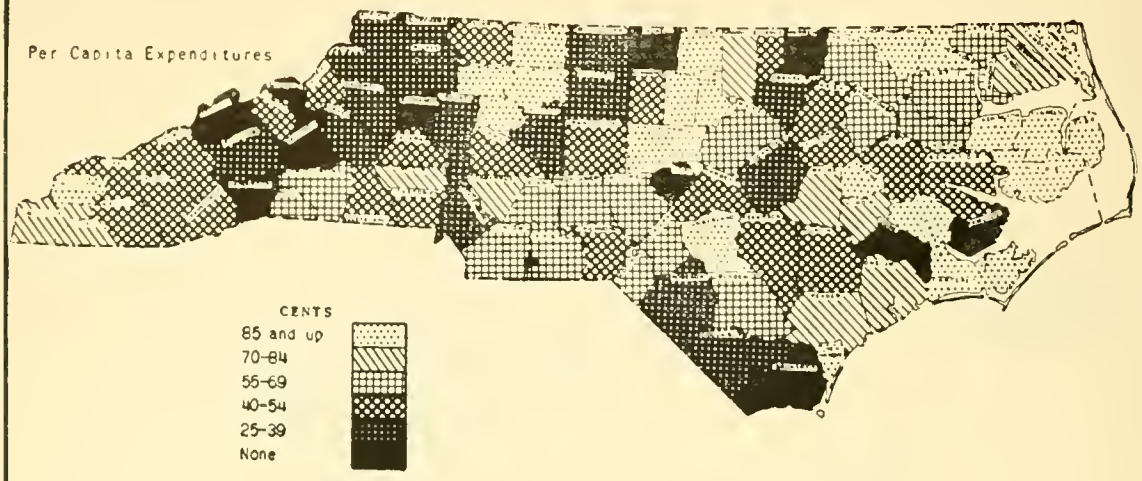
* From *Sales Management Magazine.*

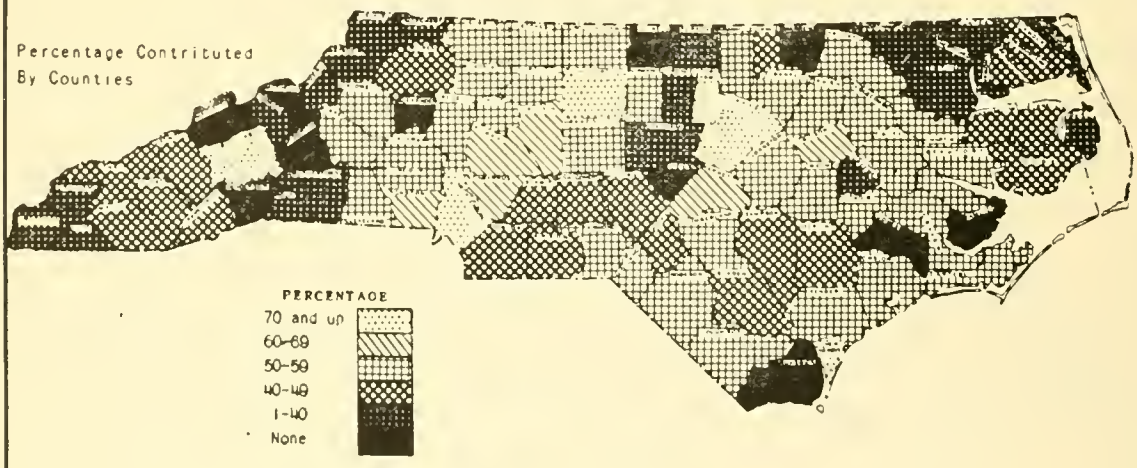

EFFECTIVE BUYING POWER PER CAPITA
AVERAGE 1943 – 1945
NORTH CAROLINA
DOLLARS
750-UP
650-749
550-649
450-549
300-449
UNDER 300
N.C. AGR. EXP. STA.
RURAL SOCIOLOGY DEPT.


HOSPITAL AREAS
NORTH CAROLINA
10-24 BEDS
25-49 BEDS
50-99 BEDS
100-199 BEDS
200-OVER
AREAS MORE THAN
10-25 MILES FROM ANY HOSPITAL

EXPENDITURES FOR FULL-TIME PUBLIC HEALTH SERVICES

North Carolina, 1943-44*





EXCLUDING ASHEVILLE, CHARLOTTE, GREENSBORO, HIGH POINT, ROCKY MOUNT, AND WINSTON-SALEM

N.C. Agricultural Experiment Station
DEPARTMENT OF RURAL SOCIOLOGY

BASED ON DATA FROM THE N C STATE BOARD OF HEALTH

Expenditures for Full-Time Public Health Services, North Carolina, 1943-44.

COUNTY, CITY, OR DISTRICT	Total Budget		% Distribution by Source of Funds			Rank Per Capita
	Amount	Per Capita	State	Local	Other*	
TOTAL STATE	$2,134,051	$ .649	7.0	57.6	35.3	36
FIVE CITIES: TOTAL	320,633	1.163	.....	74.5	25.5	
Asheville	85,992	1.676	.....	73.9	26.1	..
Charlotte	90,061	.892	..	78.4	21.6	.
Greensboro	68,349	1.152	..	70.7	29.3	..
High Point	39,061	1.015	....	71.9	28.1	.. .
Rocky Mount	37,170	1.454	.....	76.0	24.0	....
Counties and Districts: Total	1,813,418	.601	8.3	54.7	37.1	.
Alamance	24,114	.419	7.5	52.2	40.3	73
Alleghany, Ashe, Watauga	19,004	.387	22.7	34.6	42.6	76
Anson, Montgomery	27,538	.616	13.1	49.6	37.3	40
Avery, Yancey	14,895	.484	18.3	21.3	60.4	55
Beaufort	15,613	.429	11.5	50.6	37.9	69
Bertie, Chowan, Gates	28,058	.587	18.2	38.2	43.6	43
Bladen	14,930	.550	9.6	40.8	49.6	49
Buncombe, except Asheville	18,415	.320	9.8	82.1	8.1	85
Burke, Caldwell	22,715	.305	15.8	52.2	32.0	87
Cabarrus	47,414	.798	3.8	61.7	34.5	28
Carteret	17,433	.953	10.3	53.6	36.1	9
Catawba, Lincoln	31,874	.420	11.3	53.7	35.0	71
Cherokee, Clay, Graham	25,381	.802	13.0	35.4	51.6	25
Cleveland	25,391	.437	7.1	50.5	42.4	67
Columbus	17,605	.386	8.2	53.5	38.3	79
Craven	28,308	.905	6.4	50.3	43.3	15
Cumberland	51,626	.870	3.5	55.0	41.5	17
Currituck, Dare	16,049	1.259	22.4	36.8	40.8	3
Davidson	19,574	.367	8.3	67.4	24.3	81
Duplin	17,120	.431	8.4	48.8	42.8	68
Durham	123,883	1.544	1.5	71.1	27.4	2
Edgecombe, Halifax, except Rocky Mount	58,752	.630	6.1	57.6	36.3	38
Forsyth, Stokes, Yadkin, Davie, except Winston-Salem†	101,854	.971	5.3	58.5	36.1	5
Franklin	10,088	.332	14.3	50.0	35.7	84
Gaston	39,272	.449	4.6	68.9	26.5	66
Granville	23,980	.817	7.5	56.7	35.8	24
Greene	16,329	.880	9.9	37.8	52.3	16
Guilford, except Greensboro and High Point	20,120	.359	8.9	82.7	8.3	82
Harnett	21,622	.489	8.3	68.6	23.0	53
Haywood, Jackson, Macon, Swain, and Transylvania	45,131	.478	19.9	40.0	40.1	57
Hyde, Tyrrell, Washington	23,696	.921	21.9	41.3	36.7	10
Iredell	18,595	.369	9.7	57.0	33.3	80
Johnston	16,253	.255	11.1	52.6	36.3	89
Lenoir	29,320	.711	5.5	54.2	40.2	32
Martin	16,794	.643	10.7	54.6	34.7	36
Mecklenburg, except Charlotte	20,040	.393	9.0	80.5	10.5	74
Moore, Hoke	30,860	.672	9.9	41.5	48.6	34
Nash, except Rocky Mount	22,820	.538	7.9	52.9	39.2	50
New Hanover	75,941	1.584	2.4	74.5	23.2	1
Northampton, Hertford	43,862	.920	7.8	34.1	58.1	13
Onslow, Pender	27,551	.773	15.2	50.5	34.2	29

Expenditures for Full-Time Public Health Services, North Carolina, 1943-44—Continued.

COUNTY, CITY, OR DISTRICT	Total Budget		% Distribution by Source of Funds			Rank Per Capita
	Amount	Per Capita	State	Local	Other*	
Orange, Person, Chatham	63,227	.868	9.5	27.1	63.4	18
Pasquotank, Perquimans, Camden	30,338	.848	16.4	48.4	35.2	21
Pitt	29,086	.475	6.2	55.7	38.1	62
Randolph	18,739	.421	7.7	57.2	35.1	70
Richmond	19,393	.527	8.4	51.4	40.2	51
Robeson	27,477	.357	6.6	50.0	43.4	83
Rockingham	22,488	.388	8.0	59.7	32.3	75
Rowan	32,480	.469	5.5	66.4	28.1	63
Rutherford, Polk	32,305	.562	11.1	34.4	54.4	47
Sampson	22,059	.465	7.3	45.2	47.5	65
Scotland	14,699	.633	12.2	50.2	37.6	37
Stanly	18,476	.563	9.7	56.4	33.8	46
Surry	21,280	.509	7.6	50.0	42.4	52
Union	23,363	.597	7.7	46.7	45.6	42
Vance	14,574	.486	9.1	49.8	41.2	54
Wake	73,704	.673	2.4	71.0	26.5	33
Wayne	43,034	.738	4.2	57.9	37.9	31
Wilkes	13,389	.311	10.8	45.0	44.3	86
Wilson	23,487	.467	6.9	62.3	30.8	64

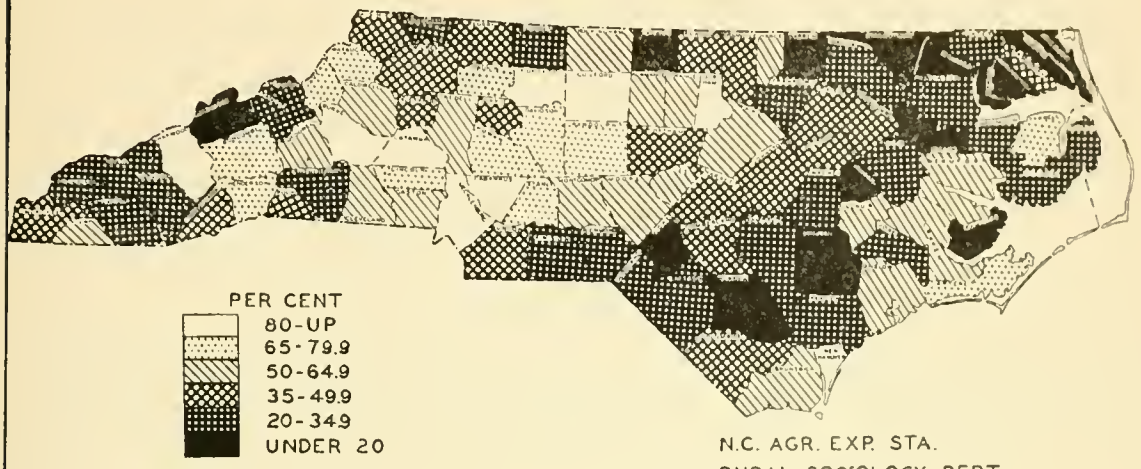
There was no full-time public health service in the following counties during the fiscal year 1943-1944: Alexander, Brunswick, Caswell, Henderson, Jones, Lee, McDowell, Madison, Mitchell, Pamlico, Warren.

* Other agencies include:
Reynolds Funds—Special from Smith Reynolds Foundation
Federal Venereal Disease Control Funds
Title VI (Federal)
Children's Bureau (Federal)

† Winston-Salem uses no State or Federal Funds

BIRTHS IN HOSPITALS

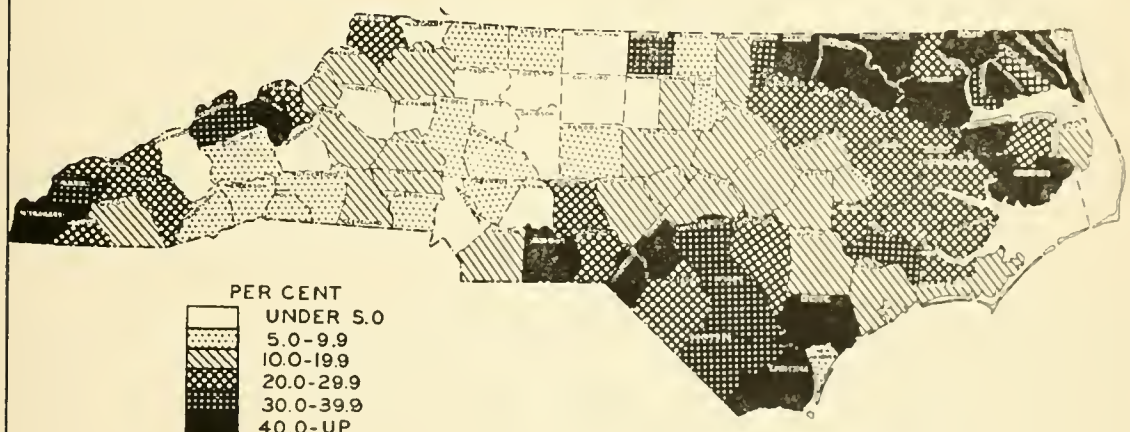
NORTH CAROLINA 1945



N.C. AGR. EXP. STA.
RURAL SOCIOLOGY DEPT.

BIRTHS ATTENDED BY MIDWIVES

NORTH CAROLINA 1945



N.C. AGR. EXP. STA.
RURAL SOCIOLOGY DEPT.

IV

Our Industrial and Urban Population Needs "More Doctors, More Hospitals, More Insurance"

(Report of Chairman Charles A. Cannon.)

In this chapter Mr. Charles A. Cannon (whose superb work with his own local hospitals had attracted statewide attention) emphasizes many valuable points, but especially these two: 1) Enlargement of hospitals should be based not on the population in the area but on the per cent of hospital beds in use. 2) Of supreme importance is service to mothers and babies and: "In order to render this service the hospital must be conveniently located—near the people. This service will not be rendered by any hospital that is located at a distance."

We have found some difficulty in drawing a line between rural areas and the industrial and urban areas. Moreover, we do not believe it practical, in considering hospital needs for the population of the State, to make such a distinction. We are, therefore, using the statistics covering the entire State as a basis for our recommendations. When this report is coordinated with the other reports, any overlapping or conflicting recommendations should be eliminated.

In considering the location and needs of hospitals, the county has been considered as a unit in most cases. The reason for this is that the county under the organization of our State Government is a geographical and political unit with definite responsibilities and with large powers and resources with which to discharge its responsibilities. Moreover, most counties have assumed and are discharging these responsibilities in a praiseworthy degree. Fortunately, for the large number of our counties the population is of such size and the taxable wealth sufficient to support and make possible a hospital located in the county, convenient to the people of the county and responsive to administrative patterns of control well established by tradition and justified by experience.

Location of Hospitals

The location of the hospital, in addition to being convenient to the patients and their families, should also be located so as to be of help to the medical men in the community in their work and to encourage younger men to locate in the various counties in the State. No hospital will be rendering its maximum service if it does not furnish, in addition to the service it renders to the patients, a rallying point for the doctors and thereby improve the quality of their work and their ability to serve the community.

It may be desirable for the State Legislature to consider creating by legislative act a few hospital districts incorporating two or more counties and providing some legal apportionment or assessment of the counties involved in the district for the raising of funds, both for the construction and operation of the hospital. Of the 34 counties without hospitals, it is thought that possibly the answer to about ⅓ of these counties is to establish hospital districts combining two or more counties in the hospital district. It is believed that ⅓ of the counties should build hospitals to take care of the requirements of their respective counties. The other ⅓ of the smaller counties would have to continue to be served as they now are through the hospital provision of their neighboring counties, or else be provided with a small cottage type of hospital capable of providing for the local doctors the diagnostic services of a laboratory and X-ray and facilities for emergency surgery and obstetrical care.

Out of the 100 counties in the State, 66 have hospitals serving 84.4% of the population, and 34 do not have hospitals serving 15.6% of the population. The counties without hospitals are to a substantial degree the rural counties. The 66 counties with hospitals cover rural and urban communities. These counties had

2.8 hospital beds per thousand population, or a total of 8,464 beds. If the State is to have the proper hospital facilities, there will have to be a substantial expansion of hospital beds in existing institutions and location of a number of new hospitals for the convenience of the patients and the doctors.

How Many Hospital Beds Do We Need?

If it is assumed that for the 34 counties without hospitals new hospitals were built with approximately 750 beds, we should have approximately 2.6 hospital beds per thousand population for the entire State, or 9,214 hospital beds. If a minimum of three beds per 1,000 population, the total hospital beds required for the State would be 10,710, leaving to be added to our existing facilities and new hospitals 1,496 beds, or approximately 1,500 beds. It is the judgment of some authorities that a minimum of four beds per thousand population is needed to meet the State-wide demand. This would require a total of 14,280 hospital beds and would require new locations and expansion of present facilities amounting to about 5,816 new beds.

This method of estimating the number of hospitals needed on a population basis, that is, number of beds per 1,000 population to be served, is a satisfactory method for establishing a primary hospital unit, but additions to that unit should not be made on a population basis, but on the basis of the percentage of existing beds in use at the average time. To illustrate: A population of 25,000 people is served by a hospital of 50 beds. Of the 50 beds, only 30 are in use at the average time, which is 60% occupancy. Under these conditions, no one would recommend three beds per 1,000 population. The two beds per 1,000 are meeting all demands.

From all available information, the existing hospitals of the State are inadequate to meet the present demands and many of the general hospitals would need some enlargement, but the extent of the enlargement would be judged not on the basis of population served but upon the per cent of beds in use at the average time.

The hospital insurance plan, which is in effect in various industries, has increased the demand for hospital care in the counties where the insured workers live. It is believed that hospital insurance will be expanded to cover not only industrial employees but other citizens of the State as well.

Hospital Construction Loans by State

This committee recommends that the primary responsibility for the financing and operation of the hospital remain in the various communities; that in order to promote the expansion of the hospital facilities with as little delay as possible the State of North Carolina set up a loan fund; that the hospitals aided shall be operated under the direction of a Board of Directors composed of representative citizens, with the tenure of service of the members expiring at different times, some in two years, some in four years, some in six years, so as to encourage stability of policies and non-political control.

The financing of the operation of the hospital should be aided by county appropriation or local tax, this money to be used in support of the hospital and to help the county take care of its indigent sick.

Needs of Our Negro Population

In the State we now have six colored hospitals located in cities or areas where they have sufficient Negro population and doctors to support the proper size institution. It is the opinion of this committee that the State should encourage the development of a limited number of general hospitals for the treatment of the colored race, these hospitals to be located in urban centers where there are a considerable number of Negro physicians. A certain number of Negro hospitals is necessary (1) for the training of Negro nurses, (2) for providing training for Negro internes, and (3) for providing hospital facilities for Negro physicians where they are practicing in sufficient numbers to render an adequate service to the patients. It is the opinion of this committee that a great number of separate hospitals for the Negro population would not be advisable for the reason that there is not a sufficient number of Negro doctors nor sufficient Negro population in a great many localities to support a hospital in the proper manner and that separate institutions in areas where they do not have the proper staff or number of patients would result in inferior medical service, and it is, therefore, much better to limit the Negro hospitals so that the Negro patients may have the advantage of better hospital and medical care.

Many of the present general hospitals provide beds for the Negro patients. In the building and expanding of the general hospitals, this plan should be followed and adequate hospital beds should be available throughout the State for the Negro population.

Obstetrical Service Must Be Improved

The nurses' training schools should be one of the important features in all hospitals that are large enough to be able to give the proper training, and special attention should be given to the proper training facilities of all hospitals that come within the qualifications of the State Training School authorities.

The committee recognizes that one of the greatest services that the local hospital can render is through its obstetrical department. Statistics show that many mothers and babies have been saved by the protection afforded the mothers in the hospitals throughout the State. *It is recognized that the hospital, in order to render this service, must be conveniently located and near to the homes of the people in the community. This service will not be rendered by any hospital that is located at a distance.*

The care and treatment of what is referred to in hospital circles as "long treatment" cases, patients with tuberculosis, mental diseases, orthopedic conditions, and the deaf, should remain as it is, a State responsibility. The cost of treating patients with these diseases of long duration imposes a financial burden that the individual family cannot assume. The State should expand and improve its facilities for the care of these unfortunates.

Charles A. Cannon, *Chairman of the Committee on Hospital and Medical Needs of Our Urban and Industrial Population.*

V

In Rural North Carolina the Need for "More Doctors, More Hospitals, More Insurance" Is Doubly Serious

(Report of Committee on Medical and Hospital Needs of Our Rural People, Thomas J. Pearsall, Chairman.)

With a wealth of data, with extreme conciseness, and with greater comprehensiveness than had ever before been attempted, this Report summarizes hospital and medical conditions in Rural North Carolina and needed remedies. The small number of rural physicians . . . and those few rapidly ageing . . . the complete absence of hospital beds in 34 counties (all rural) . . . the impossibility of getting doctors without first having hospitals near by . . . the low income of our rural people and the consequent inescapable need for Blue Cross insurance—all these basic facts are summarized with power and vision.

FOREWORD

The medical care problem in North Carolina is to a large degree a rural problem. Nearly three-fourths of our State's population live in open country areas or in towns of less than 2,500 population. The income, particularly the cash income, of our rural people is relatively low as compared with urban population. Rural people are relatively isolated from hospitals and towns where most of the physicians live.

The rural medical problem is not a simple one. There are many deficiencies and many reasons why these deficiencies exist. In general, however, the problem has these three aspects, all of which result in poor medical care for rural people:

(1) Lack of medical care facilities and personnel
(2) Lack of appreciation for the need of good medical care
(3) The inability of rural people to pay for modern medical care

These are the three sides of the triangle: facilities, education, economics. No one phase of the problem can be considered without the other. The problem of rural medical care cannot be solved by only building hospitals, or by only educating people to know the value of good facilities, or by only providing more convenient methods of payment. *All three aspects of the problem must be worked on at once.*

More rural physicians must be trained; more rural hospitals must be built; more educational and preventive work must be carried on; and convenient methods of paying for medical care must be devised. These needs and recommendations for meeting them are outlined on the following pages.

MEMBERS OF THE SUBCOMMITTEE HOSPITAL AND MEDICAL NEEDS OF OUR RURAL PEOPLE

THOMAS J. PEARSALL, *Chairman,* Rocky Mount, N. C.
DR. G. M. COOPER, *Vice-Chairman,* State Health Department, Raleigh, N. C.
DR. C. HORACE HAMILTON, *Secretary,* N. C. State College, Raleigh, N. C.
DR. L. D. BAVER, N. C. State College, Raleigh, N. C.
J. B. SLACK, Farm Security Administration, Raleigh, N. C.
DR. W. C. DAVISON, School of Medicine, Duke University, Durham, N. C.
DR. JANE S. MCKIMMON, N. C. State College, Raleigh, N. C.
HARRY B. CALDWELL, N. C. State Grange, Greensboro, N. C.
R. FLAKE SHAW, Farm Bureau Federation, Greensboro, N. C.
J. G. K. MCCLURE, Farm Federation, Asheville, N. C.
DR. B. E. WASHBURN, Rutherfordton, N. C.
DR. S. H. HOBBS, JR., Department of Sociology and Economics, Chapel Hill, N. C.
M. G. MANN, N. C. Cotton Growers Association, Raleigh, N. C.

SUMMARY OF RURAL NEEDS

1. The Need for Rural Physicians

The shortage of physicians in North Carolina is alarming. Even before the war worsened the situation in 1940, the State had only 2,298 physicians. In order to provide the recommended minimum of one physician for each 1,000 people, 1,300 additional physicians are needed. Nearly all of these physicians are needed in rural areas.

In the nation, North Carolina ranks 45th in the ratio of physicians to population. Only Alabama, South Carolina and Mississippi have lower ratios than North Carolina.

The number of general physicians practicing in rural areas, or among rural people, becomes distressingly smaller every year. In 1914 there were 1,125 physicians living in rural areas of the State. By 1940 the number of rural physicians had decreased to 719. Seventy-three per cent of our State's population, but only 31% of our physicians, lived in rural areas in 1940. (Rural includes all towns under 2,500 in population.)

As older rural physicians retire or die, few young physicians move in to take their places. In 1914 only 14.6% of our rural physicians were over 55 years of age, as compared with 37.5% in 1940. Only 29.6% of the urban physicians were over 55 in 1940.

The tendency of young physicians to specialize accentuates the rural problem. In 1914, only 3.3% of the State's physicians were full-time specialists, as compared with 22.7% in 1940.

In the poorer rural counties and communities, the shortage of physicians is much more critical than in the richer urban counties and communities. Six large urban counties with only 20.5% of the State's population have 33.5% of the physicians. Cities above 10,000 with only 20.8% of the State's population had in 1940, 49.1% of the physicians. Only four counties in the State in 1940 had more than one physician per 1,000 people, but 43 counties had less than one physician per 2,000 people.

The distribution of physicians within counties is just as unbalanced. The physicians, quite naturally, prefer to live and work in larger towns and cities where modern hospitals are available. Many rural people now live from 10 to 20 miles from a physician. Fifty-five per cent of the area of the State is more than five miles from a physician.

There is also a poor distribution of physicians by race. The State has only 129 active Negro physicians, or 7,783 Negro people per physician.

The need of rural people for a good general practitioner who lives close to them cannot be overemphasized. General practitioners perform 79.4% of all physician's services. Specialists perform 18.3% of the services, but account for 52.8% of the cost of all physicians' services. General physicians can and do perform many minor operations and services of specialists.

II. The Need for Rural Hospitals

North Carolina has 128 general hospitals, approved by the American Medical Association, containing 8,475 beds, or 2.4 beds per 1,000 population. In order to bring the hospital ratio of beds to the recommended standard of 4 beds per 1,000 people, approximately 6,000 additional beds are needed.

After allowing for unavoidable vacancies, amounting to 25%, the 6,000 additional beds would provide North Carolina with 1.1 days of hospitalization per capita. In 1940, North Carolina used .52 of a day hospitalization per capita as compared with .90 for the nation and over 1.0 for states like Maryland, Minnesota, and Louisiana.

In 1940, North Carolina ranked 42nd in the nation in number of hospital beds per 1,000 population; 39th in admissions to hospitals; 40th in percentage of hospital beds occupied; and 43rd in days of hospitalization per capita. Eighteen states had more than four general hospital beds per 1,000 population, and 18 states used more than one hospital bed per day per capita total population.

Of the 8,475 general hospital beds in North Carolina, 41.7% are located in six large urban counties. The counties of the State, by number of beds per 1,000 population are distributed as follows:

4	counties have 4 or more beds per 1,000 population
12	counties have from 3 to 4 beds per 1,000 population
19	counties have from 2 to 3 beds per 1,000 population
26	counties have from 1 to 2 beds per 1,000 population
5	counties have less than 1 bed per 1,000 population
34	counties have no hospital beds

At least 20 of the 34 counties without hospital beds are large enough to require a 50-bed hospital. Some of the 14 counties with less than 12,500 population might find it practical to build small 20- or 30-bed hospitals.

It is recognized, of course, that the need for a hospital in any particular community should be carefully studied before plans are drawn. A few counties can be served by hospitals in adjoining counties. There is also the problem of finding competent medical personnel to operate new hospitals. The committee assumes that a State Hospital Commission will be set up which, among other things, will study in detail the need for hospitals in specific communities.

The need of the Negro rural population for hospital facilities is particularly serious. At present there are only 1,665 hospital beds for Negroes, or 1.7 beds per 1,000 population. Of the 6,000 additional beds needed, 2,450 are needed for the Negro population. This estimate assumes that means will be provided to finance hospitalization for the Negro population, 75% of whom probably cannot pay all their hospital costs.

The need for hospitals is closely related to the need for physicians. The young doctor of today is trained in a well-equipped modern hospital. When he begins

private practice, quite naturally, he wants to locate near a good hospital where he can put his training to the best use. Therefore, if we are to get more physicians in rural areas, we must build small rural hospitals. There are already a number of small hospitals in rural communities and they are rendering effective service to surrounding rural areas.

III. The Need for Rural Clinics

In counties and communities that cannot support a full-sized hospital, there is a need for public health centers, or clinics, or diagnostic laboratories, the facilities of which would be equally available to all general physicians in the area. In time, as the demand grew, some of these clinics might be expanded into full-grown hospitals. For the time being, they would limit their services to simple laboratory and diagnostic service, minor surgical operations, obstetrics, and preventive work.

Many small private clinics have already demonstrated the need for such institutions. It might be well to encourage the building of more public clinics open to all physicians of the area served.

IV. The Need for a Prepayment Plan

An individual or a family cannot know when illness or the need for an emergency operation will strike. Therefore, medical and hospital expenses cannot be planned or budgeted like such items as food, clothing, or gas for the automobile. Sickness surveys, however, do show how frequently different types of illness occur and what the costs are.

In other words, we do have an actuarial basis for medical care insurance, or for group prepayment plans. Furthermore, there is now accumulating much experience which may be used in setting up prepayment plans for farmers.

One authoritative study shows, for instance, that 1,000 persons on the average can expect, in the course of a year, 1,111 cases of illness which require medical or hospital service. Of these 1,111 cases of ilness:

76.4% require only a general practitioner
3.9% require operations
23.0% require a specialist
10.6% require hospitalization
5.7% require a graduate nurse
33.0% require other nursing services

The Blue Cross Plan, sponsored by the American Hospital Association and many medical societies, provides limited hospital and surgical insurance in this State for about $30 per family. Lower rates have been made available to Farm Security borrowers but the service is more limited. Although this plan is a fine thing for those able to pay, it does not cover more than a fourth of all medical care costs.

The Farm Security Administration has developed county prepayment plans to cover the services of general practitioners; and the principle has been found to be actuarially sound and workable. Unfortunately, this plan has not been extended to help the general population but it is definitely needed.

V. The Needs of Low Income Groups

Although prepayment plans will go a long way towards helping low income groups obtain more medical and hospital care, it is quite obvious that a large percentage of our population cannot afford to pay for all the medical care that they need even with the help of a prepayment plan.

Complete medical, hospital, nursing, and dental care would cost the average family in North Carolina approximately $100. This is a most conservative estimate, likely being too low rather than too high. It is based on studies of the incidence of illness and on hospital costs and physicians' fees. It does not include drugs or public health expenditures. The $100 would pay for the following items:

General practitioner	$ 18.00
Specialist	20.00
Dentists	20.00
Hospital services	18.00
Nursing services	10.00
Laboratory services	5.00
X-ray services	5.00
Eye glasses	2.00
All other	2.00
Total	$ 100.00

The net cash income in North Carolina in 1939 was about $600 per farm family and at least 60% of the farm families received less than that amount. Obviously no farm family can afford to pay $100 per year, or a sixth of its total cash in income for medical and hospital care. A national survey shows that only families earning over $3,000 spend over $100 per year for medical care and those earning from $500 to $1,000 spend $34 per year for medical care.

If North Carolina farm families now spend 5% of their total incomes, the total amount for the farmers of the State would be about $10,000,000 in normal years. This is a little less than one-third of the amount needed for the conservative budget outlined above.

On the basis of these facts, it can be safely estimated that at least two-thirds of the farm families of the State need help in paying for adequate medical care, or in buying health insurance. Some areas will need more help than others; some low income families can pay a part but many will not be able to pay any of their medical care costs.

VI. The Need for Preventive and Educational Services

Curative medicine is expensive at any price. What farm people want and need most of all is a program which will keep them from getting sick in the first place. Then, if they do get sick, they need to know the advantages of using modern hospitals and well trained doctors. They need to know the value of going to a hospital or physician before a small ailment becomes a big one. Also they need to realize the value of frequent health examinations. Finally, they need to know more about good health habits, sanitation, and nutrition.

Preventive health work is needed particularly in our schools through which nearly all of our people pass sooner or later. Our health examinations of school children must be made more intensively, and follow-up work must be done to see that needed treatments and corrections are carried out. Parents should be required to have serious deficiencies of their children corrected, and those not able to pay should be given financial aid by the State and county governments. The program of health education in the schools should be strengthened in every possible way.

Although public health work in North Carolina has made substantial progress during recent years, much remains to be done. Our State is spending 16.1 cents and our counties are spending 37.4 cents per capita, but the recognized minimum standard for State and counties is $1 per capita. Twenty-eight states spend more per capita than North Carolina on public health activities. Were it not for federal aid, North Carolina would indeed be quite deficient in its public health program. Federal aid plus foundation funds account for 49.9 cents per capita, making a total health expenditure for North Carolina of $1.03 per capita.

RECOMMENDATIONS

I. A State Supported Four-Year Medical School

This committee gives its unqualified endorsement to the proposal that a first class four-year medical school be established as a part of the University of North Carolina. North Carolina students trained in North Carolina will remain in North Carolina to follow their chosen profession.

II. Loan Funds for Rural Medical Students

This committee recommends that a loan fund be established by the State Legislature particularly for promising rural youth, male or female, white or non-white, who wish to become rural physicians in North Carolina. Ability rather than wealth or social status would be the principal test for admission to the medical schools of the State. These students should be required to agree to return to rural communities to practice medicine for at least four years with the understanding that one-half of their debt to the loan fund should be canceled in return for fulfilling their agreement.

III. Hospital Building Program

This committee recommends that $5,000,000 be appropriated for building, and assisting counties and communities to build, hospitals and clinics whenever and wherever they are needed in the State. Careful surveys of needs should be made in every community desiring a hospital before grants are made.

This committee endorses the idea of building a large Central Hospital of approximately 600 beds or of such size as is needed for the size and type of medical school established.

This committee also recommends that a small number of district hospitals of approximately 100 beds be built (or that existing hospitals be enlarged). These hospitals would be complete in every sense of the word, and would serve both rural and urban people.

Most important of all, this committee recommends the establishment of a large number of small rural hospitals of approximately 60 beds. Possibly this will involve improvement or enlargement of existing non-profit facilities.

IV. Health Centers

This committee recommends the building of health centers in small rural communities, these centers to be made available to all qualified physicians in the area. These centers would provide diagnostic and laboratory services, facilities for minor operations, obstetrical service. A small number of beds should be provided for cases not requiring the specialized services of a larger hospital. It is also recommended that these centers be used by the public health service in carrying on its preventive and educational work.

V. Encouragement of Group Medical Care Plans

This committee recommends that the State encourage in every practical way the development of group medical care plans which make it possible for rural people to insure themselves against expensive illness, expensive treatment by specialists, and extended hospitalization.

The Blue Cross Plan of hospital and surgical service can, with some modifications, meet the needs of that third of the State's farm population able to pay all of its health insurance.

It is also recommended that these groups be asked to expand their services to include the general practitioner and prescribed drugs. This is particularly important for rural and farm people who depend so heavily on the general physician.

VI. Medical Care Fund

This committee recommends that there be appropriated annually approximately $3,000,000 to help the counties and other local units meet their expenses for the medical care of the indigent and low income families. It is planned that these funds be used only in those counties willing to contribute some of their own funds.

Each county should have the responsibility of expending these funds according to approved plans.

It is believed that this fund would give some medical aid to approximately 720,000 North Carolina people most in need. It would not help possibly another 720,000 who are now not getting adequate medical and hospital care.

It is planned that these funds would also be used to help those parents of school children who are unable to pay all the costs for correcting defects or in treating diseases revealed in the regular school health examinations.

VII. State Hospital and Medical Care Commission

It is recommended that there be set up by the State Legislature a permanent hospital and medical care commission which would have charge of the hospital building program, the medical student loan fund, as well as the administration of the medical care fund.

VI

North Carolina Needs 1)More Doctors and Medical Personnel and 2)A Much Better Distribution of Doctors

(Report of Committee on Medical School and Central Hospital, Dr. P. P. McCain, Chairman, with Sub-Committee Report on Number and Distribution of Doctors in North Carolina, Dr. Hubert B. Haywood, Chairman.)

Serving on this Committee with its beloved Chairman, the late Dr. P. P. McCain, was the following unusually distinguished group: Hon. Josephus Daniels, Dr. C. C. Carpenter, Dr. Donnell Cobb, Mrs. Laura Weil Cone, Dr. Hubert B. Haywood, James A. Gray, Alexander Webb, Dean W. R. Berryhill, Dr. Paul F. Whitaker, and Dr. W. C. Davison. Only its "Summary of Recommendations" is reprinted herewith along with a special report by Dr. Hubert B. Haywood on "Number and Distribution of Doctors in North Carolina."

The Committee on the Four-Year Medical School and Hospital Facilities for the University has, through two subcommittees, made a careful study of the number and distribution of medical personnel in the State and of representative State-supported schools of medicine in the Middle West and the South. In addition, it has had access to the findings and reports of a previous Commission making a somewhat similar study in 1937.

The findings of this Committee and of other Committees of this Commission show clearly the need for more medical personnel of all types—physicians, nurses, public health nurses, physicians in public health, medical technicians, health educators, physiotherapists, and hospital administrators—for the State as a whole and especially for the less populous rural and small town communities. It is estimated that there is a need now for 1,500 additional physicians, well distributed, in the State in order to lower our physician-population ratio to 1 to 1000, generally considered desirable for the maintenance of the proper safeguards for the health of the population.

In a study of this problem by a subcommittee of the Committee on Rural Hospitals and Rural Medical Care, it is stated by Dr. W. C. Davison[1] that 76 new physicians started practice in North Carolina each year for the period 1936 to 1942 inclusive, and that at least 75 more physicians are necessary each year to reach the desired physician-population ratio in a period of fifteen years. In order to insure this increased number of new physicians each year, there is a need for from 87 to 132 additional North Carolina medical students annually, depending on the proportion eventually practicing in the State.

North Carolina is faced with two alternatives in securing an adequate number of physicians and other medical personnel: (1) To provide means and facilities for training its own residents who desire to study medicine; or (2) To attempt to import physicians from without the State. The Committee feels that the first alternative is a sounder and wiser policy. To quote Dr. W. C. Davison, "The South will not get its physicians by migration. The students should be Southern, and to get country doctors it must be possible for students from the rural counties to study medicine."

It is true that the economic factor and hospital facilities play important roles in the number and distribution of physicians in any state. It is also true that because of these factors and that of climate some states in which there are no medical schools have a better physician-population ratio than North Carolina; yet in general[2] *"local medical schools have an important influence on the number of graduates who practice in the community and state,"* and those states in which there are greater facilities for medical training have more medical personnel available to serve the population.

---

[1]During period 1936-42 56 physicians died annually. According to Dr. W. D. James, Secretary Board of Medical Examiners, 1938-44, 80 or more physicians are necessary each year to replace losses in profession from all causes.

[2]Dr. W. C. Davison—Journal Assoc. Am. Med. Colleges, March, 1943.

Contributions of Duke and Bowman Gray

The two excellent privately endowed four-year medical schools in North Carolina are rendering a great service in medical education. The Duke University School, graduating doctors for approximately twelve years, has admitted annually only about 25 per cent of each class from state residents—15 to 23 students. The remaining 75 per cent of its students, because of its excellent national reputation, come from many states. According to the records of the State Board of Medical Examiners for the past five years, an average of 15 graduates of the Duke Medical School were annually licensed to practice in North Carolina.

The Bowman Gray School of Wake Forest College has for many years shared with the University of North Carolina the major responsibility for training North Carolina residents in medicine. It has just graduated its second class. During the five years ending in 1943 an average of 20 physicians annually who had taken their first two years at this institution were licensed to practice in North Carolina. In the future it is reasonable to expect that this number will be at least doubled.

The State is greatly indebted to these two institutions and justly proud of their accomplishments. As endowed schools of medicine they have other affiliations and responsibilities and cannot be expected to have as their primary concern the training of medical personnel for the State.

This Committee feels very strongly that there is an obligation and an opportunity for the State to provide facilities for professional education for its citizens in all branches of medicine, as it does in law, pharmacy, various types of engineering, business, agriculture, and teaching. There is ample precedent in the State for the development of professional training in endowed and State-supported institutions in the face of demonstrated need. The presence of three law schools at Duke, Wake Forest and the University has been of great value to each other, the legal profession and the State. The two engineering schools at State College and at Duke are mutually helpful to each other and the State.

Why Expand University Medical School

Because of the urgent need for training more North Carolina men and women in all branches of Medicine, it is recommended that the State provide adequate financial resources to expand the present two-year Medical School of the University which, with the School of Public Health, would serve as a foundation for developing a State University Center for Medical Education in its broad sense. The two-year school at the University has been for over fifty years the largest single source of supply for physicians in the State, educating in part approximately one-fourth of the total.

Such a development, in co-operation with and supplementing the two endowed medical schools, would, in a short time, begin to supply the State with the necessary well-trained medical personnel, provided (a) at the same time the program for expansion and better distribution of hospital and diagnostic facilities goes forward; and (b) means are made available through loan funds or scholarships to aid

worthy students from rural areas and small communities to finance their medical training.

Not only is a medical center on a state university basis necessary to increase the production of doctors and other medical workers, but its influence in maintaining and elevating the standards of medical and hospital service is equally as valuable in a program designed to give better medical care to the people of North Carolina. It would supplement the efforts of the other two schools in this field and make available consultation services in the medical specialties and more technical branches such as X-ray, pathology and general laboratory for physicians and hospitals in the smaller and more medically isolated communities. It would offer a continuous program of postgraduate training for practicing physicians in the community hospitals and at the center. It is believed that the tangible returns on these two services alone in terms of elevating the quality of medical care throughout the State would more than compensate for the cost of operation.

Nine Recommendations Regarding Medical School

In the light of the facts herein set forth and on the advice of competent medical educators, the Committee submits the following recommendations:

1. That the present two-year School of Medicine at the University of North Carolina be expanded into a standard four-year medical school.

2. That the completed school and hospital facilities be located on the University campus at Chapel Hill.

3. That a hospital of approximately 600 beds be built to provide clinical facilities for teaching and to aid in serving the hospital and general health needs of the State. It is the feeling of the Committee that there should be facilities for both white and colored patients. In addition to the general hospital ward beds, such an institution should have:

a. a moderate number of rooms for private patients;
b. facilities for psychiatric patients, both bed and ambulatory;
c. facilities for a limited number of tuberculosis cases, surgical and medical;
d. facilities for a large dispensary or out-patient department.

We recommend the following distribution of beds: 400 general ward beds; 60 beds for psychiatry; 60 beds for tuberculosis; and 70-80 beds for private patients.

4. That at a state university it would be a wise policy to provide the major part of income for the clinical staff from salary rather than from private practice.

5. That every facility and encouragement for postgraduate training for practicing physicians in the State be provided, both through intra and extra-mural courses of clinics and lectures.

6. That a School of Nursing be established and that every effort should be made through co-operation with the Woman's College to encourage more adequate professional education for students of nursing. A program of co-operation between the University School of Nursing and the nursing training schools in the smaller hospitals in the State should be carefully studied with the view of aiding in the elevation of the standards of nursing education in the State.

7. The University has the only School of Pharmacy in the State. Its present physical facilities are inadequate for the increasing demand in its undergraduate program and in the development of postgraduate training. The importance of the pharmacist in any medical service program and the need for the expansion of the Pharmacy School is recognized. The Committee, having heard the proposals of the committee from the Pharmaceutical Association, is wholeheartedly in favor of facilities for medical and pharmaceutical education at the University.

8. The shortage of dentists is acute in this State and facilities are urgently needed for training more personnel in this field. The Committee recommends that a study of this problem be continued and that the possibility of establishing a dental school in the future should be given careful consideration.

9. The Committee recognizes the need for more well-trained Negro physicians in North Carolina and in the South and feels that an opportunity should be provided for more qualified Negro citizens to study Medicine and Dentistry. Careful thought has been given to possible ways of providing educational facilities in Medicine for the Negro race. The Committee recommends that the State of North Carolina join with neighboring Southern States in exploring the possibility of developing a regional medical center for the education of Negroes.

Number and Distribution of Doctors

By HUBERT B. HAYWOOD, M.D.,
Chairman of Sub-Committee

In 1944 North Carolina had a population of 3,571,623. The population is largely rural. There is only one city with over 100,000 inhabitants. Poor housing, poor food, and poor sanitation is responsible for much of the illness in the State. To correct this educational, economic and medical measures must be instituted and carried through.

There is a lack of medical and hospital facilities in the State to meet its needs:

There are 66 counties with hospitals.
Their total population is 3,015,639.
There are 34 counties without hospitals.
Their population is 555,984 (15.6% of total).
There are 2.37 hospital beds per 1,000 population in the State.
16 counties have more than 3 beds per 1,000 (26.5% of total population.
19 counties have 2.5 beds per 1,000 (21.1% of total population).
25 counties have 1.56 beds per 1,000 (28.8% of total population).
6 counties have 0.68 beds per 1,000 (7.8% of total population).

There is obviously an unequal distribution of hospital beds to the needs of the population. The American Hospital Association reports that the adequate number of hospital beds in the nation should be 3 to 5 per 1,000.

The number of hospital beds in North Carolina for the Negro population, which is 982,108, is 1,631, giving a ratio of 1.66 per 1,000 of population. There are 41 counties which have no hospital beds for the colored race.

Eighty-nine general hospitals in the State received aid from the Duke Foundation to the amount of $419,942.00. These hospitals comprise 84% of all general hospital beds in North Carolina. 15.8% of the days of care of all white patients were free, and 53.5 % of all days of care of Negro patients treated in 89 hospitals was free. This means that 69.3% of the hospital patients in North Carolina were unable to pay hospital bills.

Eighty-four per cent of our population, or 3,015,639 people, live in 66 counties and average 2.8 hospital beds per 1,000. Sixteen per cent of the State's population, or 555,984 people, live in 34 counties without any hospital facilities. These figures speak for the need of more hospitals and hospital beds in North Carolina.

The National Farm Foundation Conference which met in Chicago on April 11-13, 1944, and dealt with Medical Care and Health Service in Rural Areas, reached these conclusions:

1. *Too few physicians,* dentists, and other medical personnel in rural areas.
2. *Relatively more old physicians in rural areas.* (It is held that a physician past 65 years old in a rural area is only 33⅓% effective.)
3. *Low ratio of hospitals* and hospital beds in rural areas.
4. *Preventive medicine is neglected* because most physicians, under present conditions, have no economic incentive to give time and effort to that field.
5. *Health education* and organization in rural areas have been neglected.
6. *Sanitation programs* have not been carried far enough in rural areas.
7. *A good medical care plan should include* all types of medical care, surgery, dentistry, ophthalmology, general practice, prescribed drugs, hospitals, etc.
8. *Rural people need most of all* a good general physician, preferably not less than one physician for each 1,000 people.
9. *The number, size, type, and location of hospitals,* clinics, and health centers should be determined on the basis of careful planning by public committees. The guiding goal is the maximum amount of service to the most people.

Presumably there might be three size classes of hospitals:

(1) *Large central hospitals* of from 500 to 1,000 beds to serve a state or any large sub-area of a state.

(2) *Intermediate sized or district hos*pitals of from 50 to 100 beds to serve districts of from 15 to 30 thousand people.

(3) *Small community hospitals* or health centers with a small number of beds for emergency cases and for cases not requiring specialized attention in a larger hospital.

With the expansion of the two-year medical school at Chapel Hill into a four-year school, a central hospital adequate for the needs of the State and for teaching medical students could be built. It seems to be the consensus that a certain number of rooms should be set aside for private patients in an institution of this type. It is easier to hold a high-class teaching faculty if they are permitted to devote a certain allotted part of their time to private patients. It is desirable for interns and resident physicians to come in contact with some private patients.

A high-class hospital, medical school and faculty is a necessity. Our population must be brought up to the level of the best in modern medicine and most certainly our medical practice and physicians graduated at our State institutions must not and will not be brought down to a low level to meet certain sections of an untrained public ignorant of medical progress.

Rural medicine could be helped by the county or district hospital. The small clinic will fill the needs of many communities.

The young physician who is well trained will be willing to go where he has the advantages of a hospital; otherwise he will not go. About 10 per cent of the younger rural doctors emigrate yearly to the larger centers.

Loan funds should be established to aid poor boys, especially in the rural areas, to enable them to get a medical education. Most of the doctors in the country districts were reared in the country. Loan funds should carry a direct obligation to return to their communities for a certain number of years.

The responsibility for financing a rural hospital should belong in part to the community in which it is located. The interest in it is greater and as a consequence it gets better local support.

In North Carolina, with a colored population of 982,108, there are 142 colored physicians. These physicians are located in 48 of our 100 counties. It is obvious that this is an inadequate number. Practically all of them are located in towns and cities. The State of Virginia, which has problems rather similar to our own, in 1944 voted to contribute to the cost of education of a maximum of 25 medical and 10 dental students at Meharry Medical School located in Nashville, Tennessee, the sum of $500 per year for each medical student and $400 per year for each dental student.

Meharry has been envisioned as a future regional medical center where all southern states might place their Negro professional students for training. Meharry Medical School took a stride toward this goal recently when it was granted an endowment of $4,300,000 by the General Education Board. The college already has contracts with the State of Tennessee for the training of 30 of its medical students. The faculty of approximately 90 is composed of both white and Negro department heads and instructors. Meharry is the largest and one of the two medical colleges for Negroes fully accredited by the Association of American Medical Colleges and is rated as "Class A" by the American Medical Association.

North Carolina physicians and population:

1944 Population The State	Number Physicians in Active Practice	Ratio
3,346,000	1,638	1 to 1,938
Wake County 103,369	83	1 to 1,245
Dare County 4,633	1	1 to 4,633
Swain County 12,111	3	1 to 4,037

Number of licensed physicians each year in North Carolina from 1940 through 1943:

1940	148
1941	119
1942	138
1943	178

Average number of medical students graduated from medical schools in North Carolina each year who are residents of North Carolina: about 65; Duke, 20; and Wake Forest, 45.

Average number of prospective medical students with sufficient or adequate premedical training to entitle them to admission to a Grade A medical school: 130.

Average number of physicians who die or retire in North Carolina each year: 50.

Average need for new physicians in order to maintain present ratio approximates 100 each year. Many of these new physicians go into specialties and do not serve the general, especially the rural, public. There are 24 specialties listed in the Directory of the American Medical Association.

The ideal prescribed by the AmericanMedical Association is one physician to every 800 to 1,000 patients. Our average at its very best before the war approximated one physician to every 1,600 patients.

Our two medical schools at their best do not take care of the education of our new physicians who are needed to supply our present medical needs and maintain our present ratio by at least forty to fifty new physicians each year. The majority of these men receive the first two years of their medical education at the Medical School of the University of North Carolina and go out of the State for the last two years of their medical education. The two schools in the State could not well absorb the fifty or more men who yearly graduate at Chapel Hill.

A medical education out of the State is more expensive to a North Carolinian than one within the State. Thus many poor boys are denied the privilege. Many of the best graduates who go out of the State are offered attractive positions in other states and never return to North Carolina to practice.

Good pre-medical preparation has reached such perfection that relatively few medical students are dropping out of medical schools. This causes a lack of vacancies in good medical schools. This ultimately means the doom of the two-year schools because there will be no openings for their graduates in Grade A schools. The graduates of the school at Chapel Hill have been the backlog of the medical profession in North Carolina. Nationally it is known as a first-class school with good and modern equipment and an excellent faculty.

There is a definite need in North Carolina for the 50 or more graduates of this school each year. If the school is abolished our medical deficit will increase. The school can readily be expanded into a four-year school of real excellence and distinction. The State of Virginia to our north supports two state-aided medical schools, the State of South Carolina one, and the State of Tennessee one.

SUMMARY

North Carolina population—3,571,623.
Present physician to population ratio—1 to 1,938.
Desirable ratio—1 to 1,000.
Colored population—982,108.
Colored physicians—142.
Ratio of colored physicians to population—1 to 6,916.
Total number of counties in North Carolina—100.
Total number of counties with hospitals—66.
Total number of counties without hospitals—34. (Their population is 555,984).
Total number of hospital beds in North Carolina per 1,000 population—2.37. (The ideal is 3 to 5 beds per 1,000.)
The number of hospital beds for Negroes per 1,000 population—1.63.
There are 41 counties with no hospital beds for Negroes.

Conclusions

Increased hospital facilities are necessary. Increase in the number of physicians in North Carolina is a necessity. It would be a calamity to sit still and await the ultimate fate of the closing of the two-year medical school at Chapel Hill. One of our best sources of physicians in North Carolina would be lost. It is practical and necessary in order to meet our demands for physicians in North Carolina to expand it into a four-year school. The solution of this problem is bigger than the mere founding of hospitals and a medical school. It is one which profoundly affects the social and economic life of North Carolina.

Signed: Hubert B. Haywood,
Chairman.

VII

Our Negro Population Asks Equal Opportunity to Get Hospital Service and Medical Training

(Report on Special Needs of Our Negro Population,
by Edson E. Blackman, M.D., Chairman.)

Both in order to be fair and just to North Carolina Negroes and to meet the requirements of the Hill-Burton Act, hospital facilities must be ample to meet the demands of both races. . . . Read also here discussion of the relative advantages of 1) a State Medical School for Negroes or 2) state participation in a Regional or Southeastern Medical School for Negroes which 3) might itself be located in Durham, Raleigh or Winston-Salem as here suggested.

To the Hospital and
Medical Care Commission:

The following recommendations are submitted by the Committee to study the special needs of our Negro population:

First, That a unit be established for Negroes in connection with the proposed four-year Medical School at the University of North Carolina.

Second, That hospital units be established for both races at advantageous and convenient locations, and that both white and Negro physicians be available to their patients.

Third, That hospital associations be encouraged to extend the Blue Cross program among Negroes.

I. Training Negro Doctors: Three Suggestions

1. In several meetings with small groups, three suggestions have been offered for consideration:

(a) That a medical training unit be established at Durham within the Organization of the North Carolina College for Negroes or affiliated with that institution. The library and the facilities for teaching the sciences and certain other subjects lend themselves to this kind of training to some extent at least. This institution is located near the University of North Carolina and Duke University, where already, by a co-operative arrangement, these universities through their faculties and libraries are assisting in the graduate and professional training offered to Negroes in North Carolina. The expansion of the graduate program in this college to include medicine might conceivably be worked out on standard levels and at reasonable costs.

(b) That a medical unit be established in Winston-Salem where some assistance and co-operation might be secured from Wake Forest College (Bowman Gray Foundation) Medical School located there. It has been suggested that the present hospital for white people now located in a Negro section there might be available as a nucleus for a medical training unit for preparing Negro doctors—when a new hospital location is found and new buildings erected. Excellent hospital facilities for both races are available in Winston-Salem. The Winston-Salem Teachers' College, near to the location referred to, might offer some valuable services to such a medical training unit.

(c) That a medical unit for training Negro doctors be developed in connection with Shaw University in Raleigh. The Leonard Medical School, formerly a part of the institution, trained a considerable number of Negro doctors who have rendered fine service to North Carolina. Some of these men are still in active service. It is suggested that aid—though a little farther removed from Durham and Chapel Hill—might be available from the medical schools in those two universities—Duke University and the University of North Carolina.

Leaders among Negroes in the State believe that a "medical school in North Carolina would attract students from surrounding states; and that the State would be discharging its own obligations in providing medical education for all its citizens. Further, the Old North State Medical Society endorses the establishing of a medical school for Negroes in the State."

The Negro population of North Carolina in 1940 was 983,574. It is now probably beyond 1,000,000. To serve this population, "the State has only 129 active Negro physicians, or 7,783 Negro people per physician."*

The minimum recommended by competent authorities is "one physician for each 1,000 people." On this basis the million Negroes in North Carolina would need about 1,000 doctors. However, if the need is estimated upon the basis of one doctor for 2,000 people instead of the minimum of one for 1,000 as recommended by competent authorities, the number needed is 500 Negro doctors in this State. According to the data secured by Dr. Hamilton, there are only 129 doctors now, or one-fourth the number actually needed on a basis of one for each 2,000 people (or twice the number of people "competent authorities" say is a doctor's population load). These figures greatly emphasize the very urgent need for more doctors if the Negro people in North Carolina are to receive even moderate medical attention.

2. In view of the magnitude of this very important matter, we suggest the appointment of a small committee of both races, including experts in the field of medical education, research, general graduate education, business and finance, race relations, who would study the problem carefully and thoroughly. The purpose of such exhaustive study would be to determine if, after investigating all the factors involved, it would be wise from all viewpoints to establish a medical unit for training doctors for the million Negro people in the State—this to be operated in connection with the proposed four-year medical college at the University of North Carolina. Such a medical unit might well be established at one of the centers mentioned above—Durham, Winston-Salem, Raleigh. The major point of this suggestion is that the persons interested in the proposed program of medical and hospital care in North Carolina, those in the leadership of the movement, the Legislature, and the citizenry of the State may all know that every possible effort has been made to provide, if possible, medical training for Negro doctors within the State.

Such a complete study would include every phase of the problem, a realistic understanding of the need for 500 or more Negro doctors instead of only 129 as now, the cost of it, and the place to operate such a unit. This would make it possible for the Legislature and other leaders to determine if the wisest solution of the problem is to establish such a medical unit in North Carolina as is desired by Negroes of the State, or, if, all things considered, the out-of-state fellowship plan would be best for both the young medical trainees themselves because of the standard of services they would receive, or other reasons, and for the State because of the cost for standard training for one race of its citizens.

---

* Summary Report of the Committee on Hospitals and Medical Care for Rural People.

II. Hospitalization for Negroes in North Carolina

On the basis of the total Negro population in 1940, viz.: 983,574 with a total hospital beds of 1,760, it appears there are approximately 1.7 hospital beds per 1,000 population. This shows there are fewer than fifty per cent of the hospital beds per 1,000 of population among Negroes in North Carolina that the average American standard requires. This means that each hospital bed must serve 559 people, whereas, the American standard requires one hospital bed for approximately each 250 people. The task of the State and the counties and cities is to provide two hospital beds where only one exists now.

Perhaps the best thing that can be said in the beginning is to quote a statement recently prepared including the most accurate up-to-date data on this subject—for the whole State, and for both races, as follows:

White and Negro Hospital Beds with Number of Beds per 1,000 population in each county.

Compiled from 1940 United States Census and from hospitals registered by American Medical Association and those receiving assistance from the Duke Endowment Fund.*

County	Population		Hospital Beds		Ratio Per 1000	
	White	Negro	White	Negro	White	Negro
Alamance	46,835	10,952	36	6	0.75	0.47
Alexander	12,516	938	0	0	0	0
Alleghany	6,032	309	0	0	0	0
Anson	14,518	13,925	24	16	1.65	1.15
Ashe	22,189	475	26	1	1.17	2.01
Avery	13,302	259	78	2	5.76	7.70
Beaufort	22,632	13,799	71	14	3.14	1.02
Bertie	11,324	14,877	0	0	0	0
Bladen	16,101	11,055	0	0	0	0
Brunswick	11,331	5,794	40	10	3.53	1.75
Buncombe	92,604	16,151	381	31	4.14	1.92
Burke	35,444	3,171	128	16	3.61	5.05
Cabarrus	49,612	9,781	106	24	2.14	2.46
Caldwell	33,037	2,768	38	4	1.76	1.45
Camden	3,195	2,245	0	0	0	0
Carteret	15,986	2,698	31	5	1.98	1.85
Caswell	10,918	9,114	0	0	0	0
Catawba	46,488	5,165	118	13	2.54	2.52
Chatham	16,814	7,912	18	0	1.06	0
Cherokee	18,631	182	23	2	1.24	10.99
Chowan	6,139	5,433	0	0	0	0
Clay	6,326	79	0	0	0	0
Cleveland	45,208	12,847	86	25	1.90	1.95
Columbus	31,227	14,436	46	13	1.47	0.91
Craven	17,265	14,033	46	59	2.67	4.20

* Compiled by Alexander Webb of the Hospital and Medical Care Commission.

County	Population		Hospital Beds		Ratio Per 1000	
	White	Negro	White	Negro	White	Negro
Cumberland	39,015	20,305	175	46	4.49	2.27
Currituck	4,373	2,336	0	0	0	0
Dare	5,570	471	0	0	0	0
Davidson	47,484	5,893	63	9	1.33	1.53
Davie	12,730	2,179	0	0	0	0
Duplin	25,576	14,163	0	0	0	0
Durham	51,714	28,530	665	164	11.28	5.75
Edgecombe	22,495	26,667	48	15	2.13	0.56
Forsyth	85,318	41,157	520	279	6.69	6.78
Franklin	17,340	13,042	0	0	0	0
Gaston	74,941	12,590	112	22	1.49	1.73
Gates	5,086	4,972	0	0	0	0
Graham	6,415	3	0	0	0	0
Granville	14,383	14,961	35	16	2.43	1.07
Greene	10,044	8,504	0	0	0	0
Guilford	121,761	32,155	375	75	3.08	2.33
Halifax	24,446	32,066	77	23	3.15	0.72
Harnett	32,237	12,002	53	14	1.33	1.17
Haywood	33,913	891	75	6	2.21	6.73
Henderson	23,917	2,132	93	9	4.09	4.22
Hertford	7,905	11,447	0	0	0	0
Hoke	5,963	8,974	0	0	0	0
Hyde	4,618	3,242	0	0	0	0
Iredell	40,849	9,575	213	18	5.21	1.88
Jackson	18,757	609	27	1	1.44	1.64
Johnston	50,349	13,449	35	0	0.69	0
Jones	6,127	4,799	0	0	0	0
Lee	13,395	5,348	38	12	2.84	2.25
Lenoir	23,399	17,812	115	28	4.91	1.57
Lincoln	20,892	3,295	84	6	4.02	1.88
McDowell	21,166	1,830	37	5	1.75	2.73
Macon	15,415	465	79	6	3.12	12.90
Madison	22,300	222	0	0	0	0
Martin	13,429	12,682	31	4	2.31	0.32
Mecklenburg	108,523	43,303	708	87	6.52	2.01
Mitchell	15,912	68	0	0	0	0
Montgomery	12,534	3,746	0	0	0	0
Moore	21,635	9,334	68	17	3.14	1.82
Nash	32,255	23,353	145	48	4.49	2.05
New Hanover	30,871	17,064	294	164	9.52	9.61
Northampton	10,766	17,533	0	0	0	0
Onslow	13,077	4,862	46	9	3.52	1.85
Orange	15,911	7,161	0	0	0	0
Pamlico	6,328	3,378	0	0	0	0
Pasquotank	11,804	8,764	23	7	1.95	0.80
Pender	9,491	8,219	0	0	0	0

County	Population		Hospital Beds		Ratio Per 1000	
	White	Negro	White	Negro	White	Negro
Perquimans	5,045	4,728	0	0	0	0
Person	15,827	9,202	25	0	1.58	0
Pitt	32,158	29,086	36	14	1.12	0.48
Polk	10,231	1,643	22	4	2.15	2.45
Randolph	40,226	4,328	69	8	1.72	1.85
Richmond	24,570	12,240	45	20	1.83	1.63
Robeson	51,287	25,473	130	50	2.53	1.96
Rockingham	45,862	12,036	105	20	2.29	1.66
Rowan	56,240	12,966	100	20	1.78	1.54
Rutherford	39,445	6,132	60	10	1.52	1.63
Sampson	30,828	16,612	6	0	0.19	0
Scotland	11,168	12,064	22	8	1.97	0.66
Stanly	28,919	3,915	84	18	2.90	4.61
Stokes	20,364	2,292	0	0	0	0
Surry	39,252	2,531	104	16	2.65	6.32
Swain	11,797	380	28	0	2.38	0
Transylvania	11,400	841	20	5	1.75	5.95
Tyrrell	3,545	2,011	15	5	4.23	2.49
Union	29,921	9,176	40	8	1.34	0.87
Vance	16,000	13,961	53	35	3.31	2.51
Wake	72,728	36,816	260	110	3.58	2.99
Warren	8,036	15,109	0	0	0	0
Washington	6,857	5,466	0	0	0	0
Watauga	17,756	358	0	0	0	0
Wayne	33,027	25,301	97	33	2.94	1.30
Wilkes	40,177	2,826	56	4	2.41	1.42
Wilson	29,152	21,067	127	41	4.63	1.95
Yadkin	19,482	1,175	0	0	0	0
Yancey	17,044	158	0	0	0	0
Totals	2,588,049	983,574	7,036	1,760		

As great as is the need for expansion of hospital services for Negroes in North Carolina, there will be some encouragement gained from the fact that in sixty-one counties there are 1,760 hospital beds—ranging from one each in two counties to 279 in one county, and 164 each in two other counties. These facts, hopeful as they are, will help stimulate other counties and communities to provide hospital beds for their Negro people. Also encourage raising the total number of hospital beds from 1,760 to from 3,500 to 4,000 for the million Negroes in the State.

III. Negroes Need Expanded Health Insurance Program

One of the ideas advanced by the "Hospital and Medical Care Commission is:

More Doctors
More Hospitals
More Insurance

It is probably true that Negroes, for reasons which are well understood, for many years have used more widely than other people various types of commercial and fraternal insurance to help them in serious sickness and in death. True, many of these organizations are "Burial Associations" intended to provide respectable funerals and the actual interment of the deceased. It is also probably true that even those with the very lowest incomes have been forced to pay an exorbitant part of their small weekly or monthly wages in order to secure the protection they sorely needed for sickness and funerals. However, while the cost has been high in many instances there was nothing to do but "to pay" the charges—and the *benefits* have been a relief and a genuine satisfaction to thousands who had no other way to provide for themselves and their loved ones, thus assuring at least minimum comforts, medical and hospital service, and when the end comes, a respectable funeral.

The program proposed by the Governor, the State Medical Society, and this Commission will prove to be a real blessing to thousands upon thousands of Negroes, give them courage and determination to lift themselves gradually but surely out of a status of making a bare living into higher income groups, who can and will support themselves in all their needs, and, further will become contributors to the support of their various communities and the State.

For Negroes, as well as for all other people in North Carolina, adoption by the State of the program to provide:

More Doctors
More Hospitals
More Insurance

such as is proposed by the Hospital and Medical Care Commission will, according to the old adage, make them and us "healthy, wealthy and wise." Then, the Governor's declaration, "The ultimate purpose of this program should be that no person in North Carolina shall lack adequate hospital care or medical treatment by reason of poverty or low income," will become a reality in North Carolina.

EDSON E. BLACKMAN,
Chairman of the Committee on
Special Needs of Our Negro Population
C. C. SPAULDING, Durham
R. E. WIMBERLY, M.D., Raleigh
CLYDE DONNELL, M.D., Durham
N. C. NEWBOLD, Raleigh
ALEXANDER WEBB, Raleigh

VIII

Competent Psychiatric Help Must Be Provided all the Way from Community Clinic to Teaching Hospital

(Extracts from Report of Committee on Mental Hygiene and Hospitalization, by Dr. Maurice H. Greenhill, Department of Neuro-Psychiatry, Duke University.)

Nothing in this volume is more thought-provoking or more valuable than this remarkable chapter on North Carolina's psychiatric problems—prepared by Dr. Maurice H. Greenhill of Duke University for our Committee on Mental Hygiene and Hospitalization. Especially highlighted are these facts: 1) The extremely poor medical care for North Carolina's mentally ill patients—at least until quite recently. 2) The actually insane compose only a small part of our mental problem. 3) "Acute receiving hospitals for the mentally ill" would save many citizens from prolonged or permanent confinement in hospitals for the insane—and thus be a good financial investment as well as a nobly humanitarian advance for our Commonwealth.

To the Hospital and
Medical Care Commission:

> *The mental health problem in North Carolina is a grave one. In a study some years ago North Carolina ranked forty-seventh among the states in the quality of its medical care for mentally ill patients in its hospitals—only 1 of the 48 states of the Union ranked lower. Yet according to the Thompson Report ("A Study of Mental Health in North Carolina," 1937), only 3% of the expenditures from the North Carolina General Fund went to the care of the mentally ill. All of this applies to State institutional care, which means that North Carolina has not taken seriously enough its responsibility for its citizens with various types of insanity.*

This, however, is only a very small part of the problem. It is common knowledge to every physician that the number of patients who suffer from insanity comprise a small group of the total number who are victims of mental illness. This proportion is estimated at 2%, therefore 98% of all individuals who have mental illnesses have no provisions whatsoever made for them for their care by the State. Because many individuals with insanity are chronic cases, the cost of care for this type of disorder is indeed high, and both the obvious need for the permanent care of such individuals and the high cost of their care has focused the attention of the State upon this particular problem.

Insanity Only Part of Mental Illness Problem

There is, however, a still greater problem related to the care of the citizens of the State with mental illnesses. This is the problem of those countless numbers who are involved in psychiatric illnesses which do not necessitate their commitment to a State institution but which constitute a sizable proportion of the practice of the average physician in the State. It has been estimated for many years by many authorities that 40 to 70% of the average physician's practice is devoted to the diagnosis and treatment of disorders at least partly psychiatric in nature. The cost of such treatment is high in terms of actual cost to the patient, cost of time of medical personnel, cost in time in absence from and loss of employment, and general cost to many public institutions, including social service agencies, courts, churches, and correctional institutions. This problem spreads even further when it is realized that the families of these individuals suffering from the minor psychiatric disorders also become involved in the problem in terms of suffering and decreased work-efficiency.

The 98% who suffer from mental disorders not listed among the insanities have such psychiatric illnesses as psychoneuroses, psychomatic disorders, and personality disorders. In the main it is these disturbances which constitute half the average physician's practice. An individual's income does not prevent him from having one of these illnesses. It may safely be stated that, as in all medical disease, there is a large proportion of patients who are indigent, so among the 98% of individuals with mental disorders but do not need confinement in a State institution for the insane, there are many who are unable to finance the care of their health.

Certain facts may bring into sharper focus the importance of the problem of mental illness in North Carolina. These may be divided for the purposes of clarity into two sections, (1) the needs of North Carolina, and (2) possible solutions for these needs.

Facts Pertaining to Mental Health Needs in North Carolina

(a) The scope of mental illness in North Carolina:

Mental disorder is made up of the following types of illnesses: Psychoses or the insanities (2%), psychoneuroses, psychosomatic disorders, and personality disorders. The number of individuals in North Carolina who suffer from insanity is known approximately and is made up of those patients in the State institutions, those who have been discharged from these institutions but still have some degree of insanity, and those awaiting admission to these institutions. The problems related to this group of patients are now the responsibility of the State Hospitals Board of Control.

Who should take the responsibility for the other 98% of mentally ill patients who are indigent? It is hoped that the Governor's Medical Care Program will help to handle this enormous problem. It is impossible at the present time to know the actual number of individuals in the State who have psychoneuroses, psychosomatic disorders, and personality problems. The number treated in the few existing psychiatric clinics in the State does not represent the total number under treatment since the average physician always has some under treatment, nor does it represent the need of other individuals for psychiatric treatment who do not receive it. As a sampling of what the need is, it is found that of 97,446 patients seen at Duke Hospital in 1943, 8,283, or 8.5%, had a psychiatric diagnosis on their hospital records. It may then be estimated that 8.5% of all the patients diagnosed and treated under the proposed North Carolina Medical Care Program will be suffering from some type of mental illness with or without other medical disorders.

Experience and investigation from the literature tells us that this figure of 8½% is indeed small. The difference in part is accounted for by the fact many individuals with medical and surgical disease have emotional symptoms which demand attention and influence healing processes and which have to be treated by a physician although he may not put down a psychiatric diagnosis in the record. This type of problem is called "psychosomatic medicine."

It must be noted that the 8½% of all medical patients who have psychiatric diagnosis is a far larger percentage than many medical problems such as tuberculosis, which are receiving considerable attention in the Medical Care Program.

It follows that of the total population of North Carolina there will be in the course of its lifetime approximately 250,000 individuals upon whom a psychiatric diagnosis will be made. Who is going to take care of the indigents in this group? The number above this who will have some type of emotional problem which a physician will have to handle and upon whom psychiatric diagnosis will never be made, is indeed staggering. Proper facilities for handling this last group in the way of (1) psychiatric education for the medical students who will become the

doctors of the State, (2) for the training of the specialists in this field, and (3) for the promotion of psychiatric clinics—these will go far in improving the quality of medical care and toward eventually reducing its cost.

(b) The cost of mental illness in North Carolina:

It is well known that the cost of care for a patient with a psychiatric disorder is higher than for any other medical illness. The cost for the care of the insane is known to the Legislature, and the proposed cost which will be necessary to raise the level of the care of the insane person is pointed out by the State Hospitals Board of Control. It is a little more difficult to estimate the cost of care for the other mental illnesses besides the insane. However, under uninformed medical practices, the psychoneurotic goes from physician to physician, has innumerable laboratory tests needlessly done in order to rule out serious medical or surgical disease before the diagnosis of psychoneurosis is made. All of this could be avoided by concentration upon the problem, by proper medical education, and by the setting up of more psychiatric clinics.

As an example of the unnecessary expenses to which individuals with psychiatric illnesses are put, the following study might be cited: Of 100 women who had been diagnosed by one or more physicians as having a purely menopausal disorder but who turned out to have psychoneuroses, it was found that the average cost to each one of these patients prior to the time that the correct diagnosis was made, was $225.00. This amount went for physical examination, X-rays, and injections of glandular products to counteract the menopause which was totally unnecessary, since many of these patients were not in menopause nor were they suffering from the effects of menopause. There will necessarily have to be an orientation to mental hygiene in the new North Carolina program to prevent such wastage of money and such injustices to the individual patient.

(c) The present resources for mental hygiene in North Carolina:

The available resources for the care of the mentally ill individual in North Carolina are infinitesimal in proportion to the need. To date most of the emphasis has been placed upon the insane which, as has been stated, comprises only 2% of the mentally ill patients. Those individuals with illnesses of a mental nature lying closer to the whole field of medicine have little opportunity for help and practically no possibility for financial assistance should they come down with a psychiatric disorder. For example, hospital care associations in the State will not pay for the hospitalization of their policyholders when they file a claim for treatment of any type of psychiatric illness. The poor suffer particularly and often become dependent upon the public welfare agencies at a tremendous cost to the State in terms of relief expenditures.

At the present time there are only three clinics in North Carolina where these patients can get help. The Department of Neuropsychiatry at Duke Hospital sees approximately 3,000 of these patients per year, the Charlotte Mental Hygiene Clinic, 275, and the Mental Hygiene Clinic of Raleigh and Wake County, 130. In the private sanitaria devoted to mental illness there are facilities at any one time for a total throughout the State of 140 patients who can receive treatment for a

disorder other than insanity. In the entire State there are only twenty physicians outside of the State Hospitals who can devote most of their time to the treatment of these problems.

Possible Solutions for These Needs

(A) The Four-Year Medical School and General Hospital:

It seems apparent that none of the health program of the State can be separated entirely from the proposed Medical Care Plan. Therefore it will be necessary to coordinate the activities of the State Hospitals for the Insane with the proposed Four-Year Medical School at the University of North Carolina and with whatever mental hygiene program might be set up for the State as a whole in terms of medical care. The medical student in training at the proposed medical school will have to have psychiatry as an important part of his curriculum if he is to be prepared to meet the enormous mental hygiene need in North Carolina. This can best be carried out in the following ways:

(1) There should be a strong modern Department of Psychiatry at the proposed Four-Year Medical School. This department should consist of a staff of five to ten psychiatrists who have had the highest training possible and the salaries of these should be sufficiently high to attract good men. Facilities should be available for the training of internes and residents for the field of psychiatry so that these men in time will supply with psychiatrists both the medical care hospitals and clinics and the State hospitals for the insane. It should also have facilities to train psychiatric nurses and psychiatric social workers. It should be flexible enough to allow medical internes to rotate through it as part of their interneship training.

(2) This department should be housed either in a wing of the General Hospital at the Four-Year Medical School or in an adjacent building. I know that 60 beds have been proposed for such a unit, but 100 or 120 would be ideal. There should be 60 beds for adult white patients, 20 beds for children, and 20 beds for Negro adult patients. Such a unit should have a good social service department, an occupational therapy department, and a physical therapy department. It should contain much laboratory space to attract good men for research opportunities. In this unit every type of modern psychiatric treatment should be used, not only for the welfare of the patient but also for teaching purposes. The men in the State hospitals for the insane should have the opportunity of working for a brief period each year in this unit for purposes of stimulation and for education related to innovations in treatment.

(3) Since the above unit is connected with the General Hospital it follows that most of the patients will come from the 98% of individuals with minor psychiatric disorders. It has been the experience of certain other states that acute receiving hospitals for the mentally ill have proved to be the most economical financially for the State and of the most benefit to the individual patient. For this reason there is in existence the Boston Psychopathic Hospital which is operated jointly by the State of Massachusetts and the Harvard Medical School, and the Langley Porter Clinic in San Francisco which functions under the State of California and the University of California Medical School. These hospitals serve

both as teaching units such as the one proposed above and as receiving hospitals for the State hospitals for the insane. Under such projects the advantages are that a great amount of teaching material is available, many patients who would otherwise have to be committed are successfully treated without commitment of a permanent nature, and the entire tempo of a receiving unit can be so much greater than that of an enormous State hospital that patients receive modern methods of treatment much more quickly than they would in a large State hospital, making for the eventual recovery of a greater number.

It would seem advisable under the Medical Care Program in this State to use the psychiatric unit of the proposed Four-Year Medical School as a receiving hospital and to establish one other receiving hospital in the State which is set up under a quality similar to that at the proposed medical school. Such a program would decrease the number of patients in the State hospitals for the insane, prevent many patients from becoming permanent wards of the State, and ultimately be a vast financial saving for North Carolina.

(B) County and Community Hospitals and Clinics:

So far the proposals have dealt with the mental health teaching program and handling of the care of the insane. Some of the larger proportion of individuals with minor psychiatric disorders would be cared for in the psychiatric unit of the General Hospital and in the other receiving hospital. But the problem might scarcely be touched through these measures unless the proposed county and community hospitals under the Medical Care Program are supplied with facilities for the care of the psychoneuroses, psychological disorders associated with medical and surgical disease, and personality problems.

Every county hospital should have a small number of beds (5 to 10) for psychiatric patients. Each one should also have in its out-patient organization a psychiatric clinic. It should, if possible, have one psychiatrist and one psychiatric social worker. If this is impossible because of limited personnel there should be some system whereby the psychiatrists from the receiving units could be available for regular and frequent psychiatric consultation.

Every small community hospital or community clinic under the Medical Care Program should have psychiatric facilities also. These smaller hospitals should have two or three beds at least for psychiatric patients and at these hospitals or clinics there should be held regularly a psychiatric clinic under the direction of psychiatrists from the county hospital or from the State receiving hospitals. Unless psychiatric care permeates through the entire State system in this way, North Carolina will be sorely neglecting one of its large problems.

North Carolina now has the opportunity of not only raising its own standards for the care of the indigent sick, but also of putting itself in the forefront of progress in the solution of one of the great problems of our time, the care of the mentally ill individual. Mental disorder is more prevalent than tuberculosis and poliomyelitis and it has too long been neglected. Its total cost to the State is as great as all other diseases put together, yet little attention is paid to it. Now perhaps something may be done.

MAURICE H. GREENHILL, M.D.

IX

Every School Child Must Have 1) A Medical Examination With 2) Correction of Discovered Defects

By CLYDE A. ERWIN, *State Superintendent of Public Instruction*
and
GEORGE M. COOPER, M.D., *N. C. State Board of Health*

The North Carolina Hospital and Medical Care Commission heartily approved the declaration in Governor R. Gregg Cherry's Inaugural Address that there should be medical examination of all school children and that "where parents are unable to finance the cost of remedying childhood physical defects, the State should make provision for this remedial work to be done." Calling on State Superintendent Clyde A. Erwin and Dr. George M. Cooper, a pioneer worker in this field, for special reports on this subject, they responded with the following studies now just brought up to date (February, 1947).

In his Inaugural Address, on January 4, 1945, Governor R. Gregg Cherry said:

"I believe that an adequate medical examination, and care, should be provided for all the children in the State whose parents are not able to provide the same. This program is in no sense intended to be a plan of socialized medicine, but it is my belief that where parents are unable to finance the cost of remedying childhood physical defects, the State should make provision for this remedial work to be done. Only less sacred than the right of a child to obtain an education is his right to get a fair chance of health in his youth. The neglect of youth becomes the burden of age and a grievous loss to the State in earning power."

The great possibilities of a program such as Governor Cherry proposes are clearly indicated by the excellent results which have been achieved under less ambitious efforts in earlier years.

Dr. Cooper, who was the father of school-health work in this State and who secured astonishing results with a minimum staff during his 14 years as director (1917-31), has summarized our past efforts admirably in the first part of this report, and there is no need for me to go into this phase.

In the light of North Carolina's own past experience in this field, however, and of the experience of other states, it seems to me that the following health objectives are now highly desirable and necessary and can be attained during the present Administration:

Basic Recommendations

1. Improvement of the extent and quality of health instruction in the public schools, including such important subjects as nutrition, first-aid and care of the sick, personal hygiene, alcoholism and narcotism, prevention and control of communicable diseases, cleanliness, social hygiene, and safety.

2. Improvement of the environmental conditions of the schools with respect to sanitation, lighting, and handwashing facilities.

3. Extensions of health services, including immunization, medical examinations and follow-ups for the correction of physical defects.

4. Special programs for children who are handicapped because of defective hearing, poor vision, and mental maladjustment.

5. A physical education program for all children from grades 1 to 12 as contrasted with an athletic program for a few.

Need for Examination and Treatment

The need for Governor Cherry's plan to examine and correct the defects of all school children—at private expense where possible and at public expense where necessary—is plain and urgent.

When the United States entered the war, the schools promptly met with the requests of the Governor and the Department to make health and physical education compulsory for all boys in the two upper grades.

Almost half of the schools, with the aid of the State and local medical and dental societies, also gave physical examinations to such students, and the percentage of those with some defect was amazing in many cases:

	PER CENT
Dental defects	85
Defective vision	16
Hernia	2
Diseased tonsils	14
Overweight	7
Underweight	16
Heart abnormalities	1.5

A majority of the children examined in our pre-school clinics each year are also found to have some defect.

The percentage of "failures" in the school has been brought down in the last 10 years from 17.1 to 12.7%, but we feel that the wasted expenditure on "repeaters" might be cut another one-third with better enforcement of compulsory attendance and better school health.

As Governor Cherry has said, "There are literally thousands of boys and girls in our schools who are not reaping the full benefits of educational opportunity because they are suffering from physical defects."

Difficulties in Way

The major factors which make progress difficult in health programs for school children are familiar to many, but I want to list a few of them as background for the thinking and planning of our leaders.

1. There is an acute shortage of teachers who are adequately trained in health education. The colleges are also short on personnel to train them.

2. The State Department has only one man available from State funds to supervise and advise with local school officials in regard to health education, safety, and physical education.*

3. The local pressure on school administrators to continue offering all the traditional subjects makes it difficult to get health and physical education into the curriculum of small schools with present teacher allotments.

4. Health service to the schools is often the last item on the list of essential services of a local Health Department. One reason is that many funds to these departments are dependent upon the services rendered, such as venereal disease treatment or maternity and infant care. Another is that funds are not available either locally or from the State to carry on an adequate corrective program in the schools.

* The School-Health Coordinating Service, a staff financed by State, Federal, and Rockefeller funds, also conducts an experimental program in about three counties each year, but this leaves 97 other counties under the supervision of one health educator.

5. Many of our small schools do not have indoor toilet facilities, and the present sanitary laws are either not adequate or not enforced.

State-Local Co-operation

In addition to the State-wide program suggested in the early part of this report, the Department would like to suggest for legislative consideration two other important possibilities on a State-Local basis:

1. To amend the School Machinery Act so as to permit any city or county administrative unit to employ personnel for health instruction, health service, and physical education, in the same way that the local units are now permitted to hire extra teachers for vocational subjects. (Such applications would require the customary showing of necessity and approval of the State Superintendent, and the cost would be paid out of moneys which come to the county school fund, by law, from fines, forfeitures, penalties, dog taxes, poll taxes, and/or regular tax sources.)

2. It would also be much easier to get city and county administrative units to provide adequate health programs if the State would match the local funds as it now does in the case of vocational subjects. (Virginia now does this as to the employment of doctors, nurses, and teachers of health and physical education.)

Clyde A. Erwin.

A School Child Health Program

By Dr. George M. Cooper,
N. C. State Board of Health

Everyone interested in bettering North Carolina health conditions should rejoice in Governor Cherry's superb advocacy of a greatly enlarged and adequately supported health program for North Carolina school children.

In view of this advocacy it should be perhaps equally helpful (1) to look back at what has been done in a day of relatively small things and small support and then (2) look forward to the vaster possibilities of a really well-rounded child health program for North Carolina. Historically this movement goes back to the inaugural address of the late Governor T. W. Bickett in 1917 when he declared:

> "I have no genius for destruction. Sense and poetry agree that a man must follow his natural bent. It results that the activities of this administration must be exerted along constructive lines. If there be a man in North Carolina who desires to drain a swamp or terrace a hillside; if there be a farmer who is struggling to escape from the crop lien's deadly clutch; if there be a tenant who hungers for a vine and fig tree he may call his own, I want all such to know that the Governor of the State will count it honor and joy to rise up at midnight and lend a helping hand."

And then coming especially to public health, he said:

> "If there be physicians who, with that divine self-forgetfulness that is the birthmark of their calling, are willing to trace Disease to its most hidden laid and plant the banners of Life in the very strongholds of Death, I want them to know that the State sees a new salvation in their sacrificial labors, and stands ready to clothe them with all needful authority, and place an unlimited armamentarium at their command."

One of the measures Governor Bickett constantly advocated was medical examination of school children, of which he said:

> "Every child has a natural right to have any mental or physical defect corrected, if it be in the power of medical or surgical skill. *The incidental fact that the parents may not be able to pay for the necessary treatment in no way affects the rights of the child.* We cannot claim to maintain an intelligent, much less a Christian civilization, if a child be allowed to stagger through life under the handicap of a mental or physical infirmity for the want of a few dollars. Indeed, it is an economical blunder for society to permit an adult to become a mental or physical derelict for want of proper surgical or medical treatment. It is cheaper to correct these infirmities than to pay for the upkeep of these derelicts in charitable institutions."

In 1917 this writer as State Medical Inspector of School Children, with the aid and co-operation of Dr. W. S. Rankin, Secretary of the State Board of Health, and Hon. J. Y. Joyner, State Superintendent of Public Instruction, visited and participated in county institutes conducted for two weeks at a time representing 65 counties in North Carolina. Practically every teacher in those counties was present at the time of this visit. It was learned directly from the teachers that more than 75 per cent of the teachers had taught the previous year in schools including those in town and cities in this percentage without any sanitary facilities whatsoever. At that time the State Board of Health was waging an intensive fight for eradicating typhoid fever, hookworm disease and other diseases due to insanitation. A strenuous effort was then inaugurated to provide sanitary facilities in all the schools, together with a screening examination by teachers to locate children with remediable defects, a later examination to be followed by agents of the State Board of Health working in counties on a circuit basis. A visit and inspection was made by competent nurses specially trained for the business at least every three years. Following the inauguration of this program from 1917 until 1935 when the plan was discontinued, the writer worked out a plan utilizing appropriations made by the Legislature directly to the State Board of Health on the urge of Governor Bickett, to follow up the findings of the nurses and the local part time county physicians who frequently rendered aid in this program. There were very few whole time health departments at that time in the State. The writer worked out a twofold program, more fully described as follows:

The Dental Program

First, was the *Dental Program* which was submitted to the North Carolina Dental Society on June 18, 1918, and unanimously endorsed. Following this meeting, six young dentists were employed, the first one beginning his work in Nash County on July 10, 1918. Each one was assigned to a separate county. He was fully equipped with a portable outfit and assigned to work in the schools for school children, regardless of classification, between the ages of 6 and 13 years. The purpose was to teach oral hygiene as well as to do repair work as an educational demonstration. Efforts had been made on an experimental basis running back into 1917 to establish the practicability of such a plan. A summary of the work done by these dentists in what was designated as "free dental clinics for school children" was published in *The Health Bulletin* for April, 1922. Up to that time nearly 70,000 children had been given free dental treatment in the five years embraced, 500,000 children had been examined by teachers searching for defects, and 240,128 children had been examined by school nurses, physicians and dentists. From that day to the present, there have never been fewer than a half dozen dentists employed on the State Board of Health staff, continually doing work for the school children in every section of North Carolina. A number of permanent dental clinics have been established (for example, here in Raleigh), and a permanent whole time dentist has been employed for many years. No dentist has ever been foolish enough to oppose this program, as it is a constant source of recruiting of patients who need treatment and who are able to pay for it for every dentist practicing in the State. It has been a godsend for more than a million school children in these 26 years since the work was inaugurated.

The Medical and Surgical Program

A companion piece to the provision for dental work was what we called *The Medical and Surgical Division.* Following the work of the nurses who in turn had followed the screening process of the teachers in 86 of our 100 counties, a program of tonsil and adenoid clinics was inaugurated. This followed an effort for two years, 1917, 1918 and 1919, to try to get the specialists in the State to take care of these needs. It was utterly impossible to do so without organized effort. Here again the approval of the Department of Eye, Ear, Nose and Throat of the State Medical Society was secured in 1918 and these tonsil clinics (called "tonsil clubs" at the time) were inaugurated in 1919 following experimental clinics in three or four counties. To make a long story short, these clinic facilities were set up in schoolhouses, beginning immediately on the close of school along in May, ending in September, and every summer from 1919 to 1931, inclusive, from 2,000 to 2,300 children were operated on successfully for the removal of tonsils and adenoids.

A total of 23,211 children received operations with only two deaths in the whole series, one death occurring in Moore County in a child who was operated on under private auspices, having been refused as a bad risk by the clinic physicians. The other child in Alleghany County went in swimming the week following the operation contrary to advice and received a pneumonic infection. The mortality records have never been approached anywhere in the United States.

A group of competent graduate nurses were in charge of this program under the specific direction of the writer during all of the first years of the work. The best operators in the State were secured for the operations. They were paid an adequate per diem from small funds collected from some of the patients. These funds also paid for additional nurses, for the equipment and supplies, a special truck being made to order and complete equipment of the very best, including cots, blankets, sheets, etc. The children were grouped in sections of 25 carefully selected according to their grave needs for such operations and of the safety with which it could be performed. They were kept over every night and sent home next morning.

As stated in the beginning of this article, this work was on a demonstration basis. It introduced good operators of established practice here in North Carolina to the people in their own sections and it has meant prosperity ever since to this group of specialists, besides the thousands upon thousands of children who secured better health as a result.

Five Features of a Future Program

In view of this writer's experience in the practice of medicine for nearly ten years and the following thirty years experience in an intensive study of this whole field, the following outline of procedures necessary for success may be set forth with faith and confidence in the effectiveness of such a program:

First, an appropriation by the State Legislature directly to the North Carolina State Board of Health is the first requisite, the appropriation to be earmarked and specifically provided for this purpose under the directorship of a physician who must be a crusader for the public interest and who is willing to fight for the underprivileged children in North Carolina, but at the same time who is a qualified, trained physician and who has common sense and initiative and the ability to do creative thinking as occasion demands.

Second, the co-operation between the State Board of Health and the State Department of Education must be re-established on the basis that it was so happily and satisfactorily carried out in those years between 1917 and 1931 in which (1) the Department of Education assumed responsibility for the teaching in the classroom of all public health subjects (just as they would mathematics and English), and (2) in which the State Board of Health has full and complete jurisdiction over the physical defects found in school children and in all matters of epidemiology and disease control.

Third, it is absolutely necessary for all local principals and teachers of all the schools to be in wholehearted sympathy with this program. It is hardly necessary to say that a strict enforcement of the attendance law is necessary and sympathetic co-operation of all classroom teachers is an absolute necessity.

Fourth, a strict system of annual inspection of every school child enrolled in the schools of every county must be provided under the leadership of the State Board of Health co-operating with the local health departments in each city and county which must provide the personnel to do the examinations following the screening

process first done by the teachers under the guidance of the State and local health departments.

Fifth, it is utterly useless to make these examinations, to do all this teaching, to make all the efforts that so-called public health education in the schoolroom or in the departments of health require unless organized plans for follow-up are provided. These plans must be submitted and followed through by the State Board of Health and the director selected to carry on this program. A co-operative plan with practicing physicians, including every specialty group and the general practitioners known as family doctors, is necessary. This can be very well arranged. Four imperative needs are these:

1. It is an absolute necessity that the State own, operate, and control a Four-Year Medical School in order to assure the proper distribution of physicians in the State.

2. It is equally as necessary to have hospital facilities and medical centers in every section of the State easily available to these children and their parents.

3. Provision must be made to take care of the big majority of the children who cannot pay top prices for medical and surgical work but who can pay something, and of course for the lesser group who cannot provide anything that costs money for themselves.

4. Defects constantly located will run the whole scale of human diseases encountered in this climate, from pediculosis to one or the other of the many hundreds of forms of eczema. Nutritional deficiencies will be rampant. Intestinal diseases are still highly prevalent in most of the rural sections of the State. A sympathetic and co-operating medical profession is an absolute necessity, together with the provision of hospital facilities to cope with the situation.

The program can be put on a practical basis and carried through with promise of 100 per cent success just as our tonsil clinics from 1919 to 1931 were carried on and just as our dental clinics have been carried on successfully for 26 years. The Legislature can provide the money but the leadership must be provided in the Health and Education Departments, including State and local and professional co-operation by physicians, dentists and hospital managers which must be forthcoming.

How Much Would It Cost?

The cost of such a program as is here set forth would depend entirely on what the people wanted done for their children. A conservative estimate of the cost of setting up the administrative machinery and getting the program under way for the first two years, if placed exclusively in the hands of the State Board of Health, would be about $300,000 a year. This estimate is based on the very successful program of diagnosis and treatment of crippled children carried on by the State Board of Health for the past eight years with the co-operation of every one of the orthopedic surgeons practicing in North Carolina.

George M. Cooper, M.D.

X

Both the Counties and the State Should Better Support An Enlarged and Adequate Public Health Program

By CARL V. REYNOLDS, M.D., *Secretary, State Board of Health*

One way to make our distressing shortage of doctors and hospitals somewhat less distressing is to decrease the number of sick or ailing persons who need doctors and hospitals—Preventive Medicine. Here the public health activities of our State (in co-operation with the Federal government) have a tremendous part to play—as here set forth by our veteran State Health Officer, Dr. Carl V. Reynolds.

There are two forms of medicine—the curative and preventive—the over-all plan of caring for and rehabilitating our people, and making medical and hospital services available to all who need them, regardless of their economic or wage-earning status. The successful promotion of both curative and preventive medicine must rest upon the realization that these are interdependent, and that the success or failure of one means the success or failure of the other.

Public Health Funds: State, $543,234; Other, $2,124,913

It is an established fact that it is necessary to have $1 per capita in order to maintain a minimum public health program. Many years have elapsed since 1877, when the State Board of Health was created by legislative enactment, with an annual appropriation of $100. During the present fiscal year, ending June 30, 1947, there has been available to the State Board of Health, for all purposes, the sum of $2,668,147. This sounds like a huge sum, but is dwarfed by expenditures for many other purposes, none of which *could be* more important than public health—and some not nearly so basically important. *Of this, only $543,234, including the Laboratory fund, came from State appropriations, the remaining $2,124,913 from the Federal Government.* The State has lost $200,000 a year by reason of the transfer of the Reynolds Fund to Wake Forest College.

For the present fiscal year the counties and cities of the State are contributing $1,815,910 to the co-operative public health program, while Federal funds are budgeted in the amount of $2,124,913 while the State appropriation stands at only $543,234—general fund, $462,991; Laboratory, $80,243.

What Public Health Service Can Do

The standard maximum State allotment for a full-time local health unit during the depression year of 1932-33, when there were only 43 such units in North Carolina, was $2,400. At the present time, there is available only $175,000 in State appropriated funds, to be spread over 94 counties with full-time health departments. If this were prorated on a basis of 100 counties, it would mean only $1,750 a county, in the face of growing needs and added responsibilities to our people. Already the local health units are serving over 95 per cent of the entire population. It is felt that an additional new appropriation of $425,000 (including $350,000 special V. D. Aid) for each year of the coming biennium would be a fair figure, and that by providing it the State would be assuming only its rightful responsibility in supporting the public health organization. An appropriation from the State of a much larger amount would be but a fraction of the amount being contributed by the counties for local health services.

Tuberculosis control, cancer control, nutrition and crippled children's work also warrant additional State funds, if this work is to be expanded to meet necessary requirements.

Approximately $10,000,000 for *tuberculosis control* has been appropriated by the Federal Government, and North Carolina has set up a definite bureau to direct

these funds, in order to receive $261,995 this fiscal year. The last Legislature (1945) appropriated $20,000 to administer the Federal funds above referred to. What we need now is an appropriation sufficient to pay experienced personnel commensurate with services rendered.

Special funds have become available for *cancer control,* but we were only able to secure these ($71,772) through a philanthropic gift of $25,000 as the last (1945) Legislature appropriated nothing. But for this benefaction, we would have lost the $71,772 Federal grant. It would be an outstanding advance in cancer control to make available at the State Laboratory of Hygiene a tissue examination for diagnostic purposes. This is essential to the success of the program, as biopsies are now outside the financial reach of many.

Nutrition must play an important part in the post-war maintenance and rehabilitation of our people. While we have made a good start with the means available—coming for the greater part from outside sources (the Rockefeller Foundation)—State funds should be provided for a long-range program, as nutrition plays and will continue to play a very definite role in preventive medicine. The Rockefeller Foundation funds will cease after November, 1947. The State should, therefore, make an appropriation to keep this important program going.

Thousands of children already have been reclaimed through the work of the Board of Health's *Crippled Children's Department.* Corrections are constantly being made for hare lips, cleft palates, bone diseases, burns, injuries at birth, congenital joint trouble, club feet, bowed legs and many other conditions which will continue to call for remediable measures. Many children needed and have been given orthopedic treatment as the result of the 1935 poliomyelitis epidemic in North Carolina. We have just passed through an epidemic of even larger proportions, the crippling results of which have not yet been fully appraised. We should be prepared to meet whatever added responsibilities this imposes upon us, and this can be done only with sufficient funds.

During the past two years, the State Board of Health has supervised 420 clinic sessions for crippled children, 1,395 were admitted to 21 selected hospitals for treatment; and, on June 30, last year 23,688 children in need of orthopedic services had been located and their names placed on the State register.

Beyond question, one of the most important links in the public health chain in North Carolina is *the State Laboratory of Hygiene.* For the fiscal year ending June 30, 1946, the cost of operating the Laboratory was only $147,239.26, though this institution saves the taxpayers of North Carolina an estimated $2,500,000 a year, based on what they would have to pay at commercial prices for the services it renders them. Yet of this total the Laboratory itself earned $71,359.63, leaving only $75,879.63 coming from the State appropriation.

Recent Public Health Achievements

Let us consider briefly some of the advances we have made through mass protection. Death rates from controllable and preventable diseases in North Carolina fell last year to new levels—diphtheria to 1.0, typhoid fever to 0.3, tuberculosis in all forms to 37.4, pellagra to 1.9, malaria to 0.6 (all per 100,000). Com-

pare these with the death rates from the same diseases a generation or even a decade ago, and the results in some instances will prove nothing short of amazing. The 1945 crude rate of 7.6—White, 6.9, and Negro 9.4—per 1,000 population was an all-time low and around 3 points below the rate for the U. S.

Although the rates still are too high, there seems to be a sustained downward trend in both maternal and infant mortality. Public health takes a justifiable pride in this, because it operates, at strategic points throughout the State, 200 maternal and child health clinics, where during the past two years, 13,433 babies were examined and 8,341 pre-school examinations were made. There were, in addition, 15,687 prospective mothers examined, approximately 9 per cent of whom were found to be syphilitic, compared with 13 per cent 6 years ago.

Also, during the two-year period ending June 30, 1946, the State Board of Health's Oral Hygiene Division gave 2,061 classroom lectures in the schools of the State on mouth health. These were attended by 92,616 children. Of these more than 57,085 who were underprivileged were treated and 34,845 whose parents were able to pay were referred to practicing dentists. We now have only seven school dentists, as compared with 34 at the beginning of the war. We cannot offer salaries commensurate with what dentists are making in private practice. Hence, the distressing shortage.

Public health is keeping track of North Carolina's venereal disease incidence with increasing efficiency. For two years prior to June 30, 1944, the State Laboratory of Hygiene made 1,095,000 serologic tests, and 1,049,000 during the previous biennium. The number of treatments given in the State's 310 public health clinics since 1939 has totaled 3,304,000, compared with approximately 1,500,000 the preceding four years.

Health Service Needed in 100 Counties

We take pride in the manner in which our State health organization mobilized for war, after a period during which preparedness was emphasized and re-emphasized, beginning in earnest in May, 1940, when it appeared inevitable to many that we were headed toward active participation in the world conflict. We should also mobilize for the peace that has followed, which will be marked by added, and often heart-rending problems. We must meet this situation, prepared to cope with it, both financially and in the matter of trained personnel.

North Carolina in 1945 recorded a crude death rate of only 7.6 (per 1,000), being the lowest in our history despite conditions, and more than three points below the death rate for the United States as a whole. This has been accomplished through mass protection, and it is logically sound to assume that this is the proper procedure to follow.

As previously stated, we now have 94 counties in North Carolina with qualified health organizations, either on a unit or a district basis. It is high time the Legislature consider the enactment of a law requiring all of North Carolina's 100 counties, through some form of taxation, to provide funds for a minimum health organization, either on a unit or district basis.

Carl V. Reynolds, M.D.,
Secretary, State Board of Health.

XI

The Origin, Progress and Statutory Organization of the Movement for Better Hospital and Medical Care

In this final section of our volume we summarize Governor Cherry's Special Message to the General Assembly February 27, 1945 . . . reproduce the Medical Care Commission Act ratified March 21, 1945 . . . present a concise history of the 1944-5 movement for better hospitals and medical care for our people . . . and conclude with a re-statement of the high hopes and ideals toward which our Commonwealth will move "as the thoughts of men are widened with the process of the sun."

Extracts from Governor Cherry's Message February 27, 1945

Mr. President, Mr. Speaker and Members of the General Assembly of North Carolina:

In my Inaugural Address reference was made to the Report of a Commission recommending further steps to be taken in medical care and public health in North Carolina.

Through the courtesy of Dr. Clarence Poe, the chairman, every member of the General Assembly has been furnished with a copy of the Report, together with a collection of pamphlets and statements from interested and capable persons supporting the findings of the distinguished group of North Carolina citizens who served on the Commission and made the Report. . . . Since such information has been furnished to you in a clear and convenient form, this is no occasion for me to restate the conclusions and findings of the Report and the reasons therefor, except as may be incident to my recommendations to you as hereinafter set out in this message. . . .

After innumerable conferences I have decided to recommend to you for your favorable action, the general principles of the Medical Care Program as embodied in a bill introduced in the Senate and House last night and which is now before you for consideration. In brief outline, the subject of the bill before you, the fundamental outlines and general principles of which I strongly recommend to you for favorable consideration, involves and sets forth the following:

FIRST:

The establishment of a "North Carolina Medical Care Commission," by the present General Assembly, and in order to effectuate the same, I further recommend that you appropriate and make available the sum of $50,000 for each year of the biennium for the operating expenses of the Commission and the performance of such other duties as may be required of the Commission under the terms of the pending act.

SECOND:

That you adopt the principle of State contributions for the hospitalization of indigent patients and that the Commission shall be authorized to promulgate rules and regulations for determining the indigency of persons hospitalized and the basis upon which hospitals and health centers shall qualify to receive contributions for indigent patients and the Commission is authorized and empowered to contribute not exceeding $1 per day for each indigent patient hospitalized in each hospital approved by it. To effectuate this provision, I recommend that you appropriate the sum of $500,000 for each year of the biennium; *provided, however,* that this appropriation shall not be available until all provisions of the General Appropriations Bill of 1945, including those relating to the emergency salary for public school teachers and state employees shall have been completely provided for.

THIRD:

That you authorize and direct the Commission to be created under the pending Act to make surveys of each county in the State to determine the need for some kind of state aid for construction and enlargement of local hospitals, and make a report of their findings and recommendations.

FOURTH:

That you authorize and direct the Commission to be created under the pending Act, and in accordance with rules which the Commission may promulgate, to make loans to worthy students in need of financial assistance who may wish to become physicians.

FIFTH:

That you adopt the principle and declare the policy of expanding the two-year medical school of the University of North Carolina into a standard four-year medical School, together with necessary hospital facilities, homes for nurses, internes and resident physicians as may be required for the expansion of such Medical School. It is not contemplated that any construction of buildings or acquisition of equipment to effectuate the declared policy of expansion of such medical school can be performed during the war period.

SIXTH:

That you authorize and direct the Commission to be created by the pending act to make careful investigation of the necessity and methods of providing medical training for Negro students, and make a report of their findings and recommendations.

* * *

Many desirable services, richly deserved by our people, must be postponed for the duration of the war. . . . In like manner, much of the proposals of the Hospitals and medical Care Commission must be postponed to some future date.

But Senators and Lady and Gentlemen of the House, a most comprehensive plan of hospitalization and medical care has been laid before you and is contained in the report (of the Hospital and Medical Care Commission) now on your desks. The bill before you and now under consideration endorses the principles and partially effectuates the plan outlined in such report. I personally favor and sincerely believe that improvement in medical care in North Carolina is sure to come and that it is definitely on the way. Just when the capstone will be finally laid for a comprehensive and adequate plan of medical care in North Carolina is a matter for future legislators—but we here today and in the succeeding days of this General Assembly, ought to lay the cornerstone and the broad foundation upon which we can build such program as our people seek to obtain and ought to have.

The people of our State at decisive times in our history have made the great decision to build a more enlightened and productive State. In our poverty we built a great school system; in spite of debts and deficits we built a great public highway system. In these days, we shall not be afraid to lay the foundations for proper medical and hospital care needed by our poorer and less fortunate fellow citizens. The voices of the sick, the suffering and even the dying cry out to us at this time for help. These voices which we hear, and voices too long unheard, come to us across the plains and hills of every part of our State. It is my belief that we should answer their calls and minister to their needs by laying the foundation of a balanced and humane program for more adequate medical care for the people of this Commonwealth.

As members of this General Assembly, you have the responsibility and privilege of making another decisive decision in the history of our State. I ask you to believe with me that "Better Schools, Better Roads and Better Health" constitute the three main high roads for the advancement of North Carolina. I have confidence that you, in this Hour of Destiny, will make the decision embracing a program for the future happiness and welfare of North Carolina.

Act Establishing the Medical Care Commission

H. B. No. 594

An Act to Provide a State-wide Program of Hospital and Medical Care . . . to Create the North Carolina Medical Care Commission . . . to Make Contingent Appropriations for Contributions for the Care of Indigent Sick in Approved Hospitals . . . to make Surveys and recommendations for the Construction of Necessary Hospitals and Health Centers . . . to Provide for the Expansion of the Medical School of the University of North Carolina . . . to provide for the Construction of a Central Hospital as a Memorial to North Carolina Dead of World War I and World War II . . . and Other Provisions Relating Thereto.

The General Assembly of North Carolina do enact:

Section 1. That Chapter one hundred and thirty-one of the General Statutes of North Carolina be, and the same hereby is, amended by adding the following articles and sections.

Article 12.

Sec. 131-117. *North Carolina Medical Care Commission.* There is hereby created a State agency to be known as "The North Carolina Medical Care Commission," which shall be composed of 20 members nominated and appointed as follows:

Three members shall be nominated by the Medical Society of the State of North Carolina; one member by the North Carolina Hospital Association; one member by the North Carolina Dental Society; one member by the North Carolina Nurses' Association; one member by the North Carolina Pharmaceutical Association; and one member by the Duke Foundation, for appointment by the Governor.

Ten members of said Commission shall be appointed by the Governor and selected so as to fairly represent agriculture, industry, labor, and other interests and groups in North Carolina. In appointing the members of said Commission, the Governor shall designate the term for which each member is appointed. Four of said members shall be appointed for a term of one year; four for a term of two years; four for a term of three years; five for a term of four years; and thereafter, all appointments shall be for a term of four years. All vacancies shall be filled by the Governor for the unexpired term. The Commissioner of Public Welfare, and the Secretary of the State Board of Health shall be ex-officio members of the Commission, without voting power.

The Commission shall elect, with the approval of the Governor, a chairman and a vice chairman. All members, except the Commissioner of Public Welfare, and the Secretary of the State Board of Health, shall receive a per diem of seven dollars ($7.00) and necessary travel expenses.

Sec. 131-118. *Commission Authorized to Employ Executive Secretary.* The North Carolina Medical Care Commission is authorized and empowered to employ, subject to the approval of the Governor, an Executive Secretary, and to determine his or her salary under the provisions of the Personnel Act. The Executive Secretary may employ such additional persons as may be required to carry out the provisions of this Act, subject to approval of the Commission, and the provisions of the Personnel Act. Office space for the Commission shall be provided by the Board of Public Buildings and Grounds, in Raleigh.

Sec. 131-119. *Contribution for Indigent Patients.* The North Carolina Medical Care Commission, in accordance with the rules and regulations promulgated by it, is hereby authorized and empowered to contribute not exceeding one dollar ($1.00) per day for each indigent patient hospitalized in any hospital approved by it, provided the balance of the cost shall be provided by the county or city having responsibility for the care of such indigent patient, or from other sources. The Commission shall promulgate rules and regulations for determining the indigency of the persons hospitalized and the basis upon which hospitals and health centers shall qualify to receive the benefits of this section.

For the purpose of carrying out the provisions of this section, there is hereby appropriated from the General Fund to the North Carolina Medical Care Commission for the fiscal year ending

June 30, 1946, the sum of $500,000; and for the fiscal year ending June 30, 1947, the sum of $500,000, provided that the benefits of this section shall apply only to hospitals publicly owned, or owned and operated by charitable, non-profit, non-stock corporations, and provided further that these appropriations provided in this section shall not be available until all provisions of Section 23½ of the Committee Substitute for House Bill Number 11, the General Appropriations Bill of 1945, relating to the emergency salary for public school teachers and State employees shall have been completely and fully provided for.

Sec. 131-120. *Construction and Enlargement of Local Hospitals.* The North Carolina Medical Care Commission is hereby authorized and empowered to begin immediate surveys of each county in the State to determine:

(a) The hospital needs of the county or area;

(b) The economic ability of the county or area to support adequate hospital service;

(c) What assistance by the State, if any, is necessary to supplement all other available funds, to finance the construction of new hospitals and health centers, and necessary equipment to provide adequate hospital service for the citizens of the county or area; and to report this information, together with its recommendations, to the Governor, who shall transmit this report to the next session of the General Assembly for such legislative action as it may deem necessary to effectuate an adequate State-wide hospital program.

The North Carolina Medical Care Commission is hereby authorized and empowered to act as the agency of the State of North Carolina for the purpose of setting up and administering any State-wide plan for the construction and maintenance of hospitals, public health centers and related facilities, which is now or may be required in order to comply with any Federal law and in order to receive and administer any funds which may be provided by an Act of Congress for such purpose; and the Commission, as such agency of the State of North Carolina with the advice of the State Advisory Council set up as hereinafter provided, shall have the right to promulgate such state-wide plans for the construction and maintenance of hospitals, medical centers and related facilities, or such other plans as may be found desirable and necessary in order to meet the requirements and receive the benefits of any Federal legislation with regard thereto. The said Commission shall be authorized to receive and administer any funds which may be appropriated by any Act of Congress for the construction of hospitals, medical centers and related activities or facilities, which may at any time in the future become available for such purposes; and said Commission shall be further authorized to receive and administer any other Federal funds, which may be available, in the furtherance of any activity in which the Commission is authorized and empowered to engage in under the provisions of this Act establishing said Commission, and in connection therewith, the Commission is authorized to adopt such rules and regulations.

Sec. 131-121. *Medical Student Loan Fund.* The North Carolina Medical Care Commission is hereby authorized and empowered, in accordance with such rules as it may promulgate, to make loans to students who may wish to become physicians and who are accepted for enrollment in any standard four-year medical school in North Carolina, provided such student shall agree that upon graduation and upon being licensed, to practice medicine in some rural area in North Carolina for at least four years. Rural area, for the purpose of this section, shall mean any town or village having less than 2,500 population according to the last decennial census, or area outside and around such towns or villages. Such loans shall bear such rate of interest as may be fixed by the Commission, not to exceed 4 per cent per annum.

For the purpose of carrying out the provisions of this section, there is hereby appropriated from the General Fund for the fiscal year ending June 30, 1946, to the North Carolina Medical Care Commission the sum of $50,000. The State Treasurer shall set up on his records an account to which shall be deposited said amount, and from which withdrawals shall be made upon vouchers made by the State Auditor upon requests of the North Carolina Medical Care Commission. This appropriation shall not lapse at the end of any biennium, but shall remain available for the purposes herein stated.

Sec. 131-122. *Expansion of Medical School of the University of North Carolina.* In order to carry forward the State-wide plan of hospital and medical care, the Board of Trustees of the Uni-

versity of North Carolina, by and with the approval of the Governor and the North Carolina Medical Care Commission, is hereby authorized and empowered to expand the two-year Medical School of the University of North Carolina into a standard four-year medical school. The North Carolina Medical Care Commission is authorized and directed to make a complete survey of all factors involved in determining the location of the expanded medical school, giving especial attention to the advantages and disadvantages of locating said school in one of the large cities of the State, and shall render a report of their findings to the Governor and Board of Trustees of the University of North Carolina.

Provided that no action shall be taken under this provision of this section, other than the work of the Commission, until a survey has been made and a report submitted to the Governor and Medical Care Commission by the Rockefeller Foundation or some other accredited agency with experience in the field of surveying large areas in connection with medical education and medical care. The report of such agency is to be submitted to the Governor and the Medical Care Commission in a reasonable time in advance of the report of the Governor and the Commission to the Board of Trustees.

Sec. 131-123. *Appropriations for Expenses of the North Carolina Medical Care Commission.* In order to provide funds for the expenses of the North Carolina Medical Care Commission, there is hereby appropriated from the General Fund for the fiscal year ending June 30, 1946, the sum of $50,000 and for the fiscal year ending June 30, 1947, the sum of $50,000.

Sec. 131-124. *Medical Training for Negroes.* The North Carolina Medical Care Commission shall make careful investigation of the methods for providing necessary medical training for Negro students, and shall report its findings to the next session of the General Assembly. In addition to the benefits provided by Section 116-110 of the General Statutes of North Carolina, the North Carolina Medical Care Commission is hereby authorized to make loans to Negro Medical students from the fund provided in Section 131-121, subject to such rules, regulations, and conditions as the Commission may prescribe.

Sec. 131-125. *Acceptance of Gifts, Grants and Donations.* The North Carolina Medical Care Commission is hereby authorized and empowered to accept and administer gifts, grants, or donations which may be made by the Federal Government or by any person, firm, or corporation for the purpose of carrying out the objects of this Act, provided the acceptance of such gifts, grants, or donations shall be made without requiring the surrender of authority or control in the administration thereof by the North Carolina Medical Care Commission.

Sec. 131-126. *Hospital Care Associations.* The North Carolina Medical Care Commission is hereby authorized to encourage the development of group insurance plans, the Blue Cross Plan, and other plans which provide for insurance for the public against the costs of disease and illness.

Sec. 2. That all laws and clauses of laws in conflict with this Act are hereby repealed.

Sec. 3. This Act shall be in full force and effect on and after its ratification.

In the General Assembly read three times and ratified, this the 21st day of March, 1945.

Genesis and Progress of Movement for State Aid to Hospitals and Medical Care for North Carolina People

I.

Early in 1944 a committee of distinguished physicians, including President James W. Vernon, President-elect Paul F. Whitaker, and Past Presidents Donnell Cobb, Hubert B. Haywood and P. P. McCain of the North Carolina Medical Society, presented to Governor J. M. Broughton the following summary of the hospital and medical situation in North Carolina:

"We are immediately faced with critical shortages of general hospital facilities and trained medical personnel of all types . . . In 1941 North Carolina, the 11th largest state and the 5th most rapidly growing, stood in 42nd place, tied with South Carolina, in the number of general hospital beds per thousand population and in a comparable position in the number of doctors. In addition, we have always had in this State too few trained medical personnel—nurses, dietitians, doctors of public health, sanitary engineers, sanitarians, medical technicians, and health educators. To quote Dean Davison of Duke University Medical School, 'The South needs twice as many doctors and three times as many hospital beds, to raise medical facilities to the average for those of the country as a whole,'—which probably will not be an adequate standard for medical needs of the State in the future."

II.

To remedy this situation these eminent physicians then recommended the following three things:

> *1. The building of a large well-equipped general hospital, initially 500 to 700 beds . . . which would logically be placed adjoining the present buildings of the School of Medicine and Public Health and Navy Hospital at Chapel Hill.*
>
> *2. Smaller hospitals, well equipped for diagnostic work and treatment, set up in different sections of the State in which there are now no hospital facilities.*
>
> *3. The present two-year Medical School of the University should be expanded into a four-year School of Medicine.*

III.

Next, Governor J. M. Broughton presented this appeal of State Medical Society leaders to a full meeting of the Board of Trustees of the Consolidated University of North Carolina January 31, 1944, saying:

"It would seem wise under a suitable basis of co-operation between the Federal Government, the respective state governments, local governments and various foundations and funds to make provision for adequate medical care and service to

those of our citizenship who by reason of unemployment or low income are unable to provide this service for themselves. The State Society is not only favorable to such general plan, but would be glad to join in the sponsorship of any move that may be made in this direction . . . *The ultimate purpose of this program should be that no person in North Carolina shall lack adequate hospital care or medical treatment by reason of poverty or low income.*"

IV.

At this meeting of Trustees "Mr. Walter Murphy moved that the Trustees go on record as unanimously and enthusiastically approving the Governor's recommendations and report; and that a Commission be appointed by him to make a comprehensive study of the whole subject and submit recommendations to the next General Assembly. The motion was seconded by W. G. Clark, Carl Durham, J. C. B. Ehringhaus and others, and was unanimously approved."

V.

Next, the Executive Committee of the State Medical Society formally endorsed this whole program "in principle" as did the State Medical Society in regular annual session in Pinehurst May 1, 1944.

VI.

A 50-man Hospital and Medical Care Commission appointed by Governor Broughton to promote the program approved by the University Trustees met in Raleigh February 28, 1944, and organized (see list of members elsewhere) with capable subcommittees on the following subjects:

1. *Hospital and Medical Care for Our Rural Population*
2. *Hospital and Medical Care for Our Industrial and Urban Population*
3. *Special Needs of Our Negro Population*
4. *Four-Year Medical School for University and Hospital Facilities*
5. *Mental Hygiene and Hospitalization*
6. *Hospital and Medical Care Plans in Other States*
7. *Committee on Charts, Maps and Statistical Data*

VII.

On February 29, 1944, Hon. R. Gregg Cherry, one of the candidates for Governor, gave the movement hearty endorsement.

VIII.

On May 4, 1944, the Democratic State Convention met in Raleigh and the platform unanimously adopted "unreservedly approved" the following three measures:

"1. The provision of a standard Four-Year Medical Course at the University of North Carolina;

"2. The establishment and maintenance of a large hospital center in connection with this medical school; and—

"3. The establishment and maintenance of regional hospital centers in areas not now adequately served by existing hospital facilities."

Republican leadership in the State offered similar support.

IX.

On October 11, 1944, the seven subcommittees, having made thoroughgoing studies of conditions and policies in this and other states since February 28, met in joint session and adopted the "More Doctors, More Hospitals, More Insurance" general Commission's Report entitled "To All the People of North Carolina—A Proposed Statewide Program of Hospital and Medical Care." (See page 1.)

X.

To County Medical Societies all over North Carolina, copies of this report were then sent for thorough study and debate. Reports from 65 counties sent to the secretary of the State Medical Society up to January 31, 1945, showed results as follows:

Entirely approving the plan	*55 counties*
Approving in part	*8 counties*
Disapproving in entirety	*2 counties*

XI.

In December, 1944, the Advisory Budget Commission, following an extensive hearing on the foregoing program, formally and officially advised the General Assembly as follows:

"We . . . hope that the program will be approved by the General Assembly to the end, as stated by the Governor in naming the Commission, 'that no person in North Carolina shall lack adequate hospital care or medical treatment by reason of poverty or low income.' "

XI

On February 1, 1945, the Final Report of the Hospital and Medical Care Commission was presented to Governor R. Gregg Cherry and the General Assembly (see page 9). On February 27, 1945, Governor Cherry addressed a joint session of House and Senate (see page 105), and on March 21, 1945, the North Carolina Medical Care Commission Act (see page 108) was ratified. Governor Cherry appointed the following persons as members of the Medical Care Commission and on July 27, 1945, this group formally assumed leadership of the newly accepted State obligation to provide "equality of opportunity" for all our people in their struggles with disease and death:—James H. Clark, Chairman, Dr. Clarence Poe, Vice-Chairman, J. W. Beam, Paul B. Bissette, Franklin J. Blythe, Dr. William M. Coppridge, Don S. Elias, Sample B. Forbus, Dr. Fred Hale, Dr. Fred C.

Hubbard, B. Everett Jordan, Dr. W. S. Rankin, Dr. Carl V. Reynolds, Mrs. Elizabeth Dillard Reynolds, William M. Rich, William B. Rodman, Rev. C. E. Rozzelle, Flora Wakefield, Dr. Paul F. Whitaker, Dr. Ellen B. Winston.

XII

Because of the pioneer work of the Hospital and Medical Care Commission and the excellence of the work done by its various sub-committees, its activities early attracted nation-wide attention among leaders interested in better provision for medical and hospital care the nation over. For this reason the Chairman of the North Carolina Hospital and Medical Care Commission was asked to serve as one of two Southern members of the National Commission on Hospital Care, organized October 1, 1944, and which continued its labors until October 1, 1946, when it completed its monumental study volume entitled *Hospital Care in the United States.* Dr. C. Horace Hamilton, the efficient director of our Committee on Statistical Studies, also served for a year, 1945-6, as Director of Sociological Studies in the preparation of this volume.

XIII

Throughout this period all leaders in the North Carolina Hospital and Medical Care Commission realized that without Federal aid in hospital building, it might be years before North Carolina could meet even minimum standards as to the number of doctors and hospital beds per 1,000 population. For this reason the Chairman and Hon. Wm. B. Umstead (acting as designated spokesman for Governor Cherry) addressed Congressional hearings and made repeated trips to Washington in 1945-6 in behalf of the Hill-Burton Bill which should ultimately give North Carolina $3,500,000 a year for five years to help build hospitals. Dr. Frank P. Graham, Hon. J. Bayard Clark, Hon. A. L. Bulwinkle, and Senator Clyde R. Hoey also aided valiantly in this cause before its final triumph in 1946. Governor J. M. Broughton was named on the Federal Hospital Council.

XIV

Early in 1945 began a statewide citizens' movement to support and promote the Six Point Program which had been first put forward by the State Hospital and Medical Care Commission in 1944-5 and then developed in Governor Cherry's message and the Medical Care Commission Act. This organization, known as "The North Carolina Good Health Association," chose Dr. I. G. Greer of Thomasville as President, Harry B. Caldwell as Executive Secretary, and elected the following leaders of North Carolina progress in various fields as Directors: Josephus Daniels, Raleigh; William B. Umstead, Dr. W. M. Coppridge, George Watts Hill, Durham; R. Flake Shaw, Mrs. Harry Caldwell, Ben Cone, Julian Price, Greensboro; Thomas J. Pearsall, Hyman Battle, Rocky Mount; Charles A. Cannon, Concord; Irving Carlyle, Winston-Salem. Thus in the years ahead an active citizens' organization profoundly interested in constantly advancing toward the complete fulfillment of the Six Point Program will parallel and support the official activities of the Medical Care Commission itself under the able leadership of Chairman James H. Clark and his associates.

The As-Yet-Unrealized Ideals Toward Which We Move

I.

The ultimate purpose of this program should be that no person in North Carolina shall lack adequate hospital care or medical treatment by reason of poverty or low income.

—Governor J. Melville Broughton, January 31, 1944.

II.

An adequate medical examination should be provided for all children. . . . Where parents are unable to finance the cost of remedying childhood physical defects, the state should make provision for this remedial work—the Sacred Right of Every Child to Health. . . . The neglect of Youth becomes the burden of Age and a grievous loss to the state in earning power.

—Governor R. Gregg Cherry, in Inaugral Address, 1945.

III.

We must now strive toward the ultimate fulfillment of this great new ideal of American democracy:

For every person, rich or poor, high or low, urban or rural, white or black, an equal right to adequate hospital and medical care whenever and wherever he makes the same grim battle against ever-menacing Death which sooner or later we must all make for ourselves and see our loved ones make.

—Conclusion of Address in support of Hill-Burton Bill by Chairman Clarence Poe, Before U. S. Senate Committee, Washington, March 12, 1945.

LIST OF CHARTS AND TABLES

INDEX OF OTHER ARTICLES, CHARTS, ETC.